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CONTENTS.

Agricultural—An Actual Experience in Selling Wool—Washing Sheep—Silos and Silage—Public Sales of Live Stock....	1
The Horse—Dates of Trotting Meetings in Michigan for 1888—September Entries of the Detroit Driving Club—Kirkwood—The Grand Circus Green—Horses—	2
Trade—Canadian Cheese-Making—Parasites on Live Stock—Silage in New England—Carrots as a Farm Crop—Why the Strippings Afford the Richest Milk—Agricultural Yard—Seasonable Hints.....	2
Horticultural—Garden Vegetables—Fruit Garden—Fertilizers—Commercial Fertilizers vs. Stable Manures—Insects in a Pine Orchard—Culture of Tomatoes—Protecting Young Melon Plants—Will it Answer? Varieties Running Out—Horticultural Notes.....	3
The Poultry Yard—Seasonable Hints.....	3
Editorial—Wheat—Corn and Oats—Dairy Products—Texas Fever Quarantine—Another Wool-Growing Experiment—Grub in the Head of Sheep—Horticultural Meetings—Stock Notes.....	7
New Summary—Michigan.....	5
General—Foreign.....	5
A Cheap Country Paint.....	5
Poetry—New Moon Wishes—Agro-Dolce—	6
Miscellaneous—Isabel Fae—Artistic Dress Designers—The Good Old Times—The Great American Skirmish—Catastrophe to War—Poems by Authors—	6
A Woman's Reason—The Pic in China—The Sultan's Musicians—Two Cheap Refrigerators—Mr. Beeches Amusements—The Octopus—The Perils of Our Fast Age—For Girls—Varieties—Craff.....	7
Spraying Fruit Trees—The Cincinnati Centennial Exposition.....	8
Commercial.....	8

Agricultural.

AN ACTUAL EXPERIENCE IN SELLING WOOL.

BRIGHTON, June 6th, 1888.

To the Editor of the Michigan Farmer.

In your issue of the 2d inst. I have perused the letter of Hallowell & Coburn to Mr. Potter, and have been interested in your timely remarks on the same. It reminds me of my own experience, which I will give for the benefit of wool buyers: A number of years ago I was a member of the Brighton Farmers' Club. A little before shearing time the subject of the preparation of wool for market came before the club. Myself, with some others advocated washing clean, leaving out of the flocks tags and clippings, and attaching our names to each fleece as a guarantee of its quality. My argument was, as our club represented from twenty to thirty thousand pounds, that we might build up a reputation for our wool that would induce manufacturers to buy direct from us and make it mutually beneficial for both. A large majority of the club thought it would not pay. My experience proved they were right. To satisfy myself I put my wool up in fine clean order, leaving out the tags and clippings, and attaching my name to each fleece. I think only one other member did the same.

When the buyer came around, he examined my wool, pronounced it very nice, but could give me only the price paid for the best wool put up in the ordinary way, which I was obliged to accept. Before shearing the next year I received a letter from my former purchaser, enclosing a letter from the manufacturer, saying my clip of wool was the best from a lot of ten thousand pounds, and wishing him to secure the next clip. That was certainly encouraging and gratifying. I put it up the same again. When the buyer came around he was pleased with the wool, but would not offer me more than three cents over the price for ordinary wool. When I weighed what I will call my waste wool and reckoned the shrinkage in price, I found myself minus quite a little sum, and as I raised wool for profit and not for a reputation at a loss, I naturally turned back to the old method.

I will make no comments; I think you and others can easily draw your own conclusions as to who are responsible for the present condition in which our wool goes to market.

If you will allow me, I will depart from the diplomatic rule that only one subject shall be mentioned in one communication, to say that the same experience has occurred in the selling of cotton. I remember reading an intelligent letter from a cotton planter who tried the experiment of putting up his cotton very clean and free from foreign substances; but found that cotton buyers preferred southern dirt to a large extent, thus getting the cotton apparently little dirtier. As a result of this farming, I am not personally interested in the sale of wool, but feel desirous of seeing a mutual arrangement agreed upon, under which neither the producer nor the buyer will have occasion to complain.

J. M. HOLDEN.

RED POLLED CATTLE.

SARAS, June 4, 1888.

To the Editor of the Michigan Farmer.

We have sold four registered Red Polled bulls to Gen. Ross, of Iowa City, Iowa, one five years old, Rudolph No. 194; he was in ordinary flesh and weighed 1,810 lbs. One two years old, Zeno No. 258, and two calves, one nine and the other six months old.

There is a greater demand for polled cattle than ever before, for people find it is much better to breed off the horns than to practice dehorning animals in so cruel a manner.

Mr. Ross is one of the largest breeders in the west. He has just made another importation, they are now in quarantine.

J. F. & E. W. ENGLISH.

For the Michigan Farmer.
WASHING SHEEP.

According to the best of my recollection I have never yet written an article upon this subject, though it has been constantly agitated in the agricultural press since my earliest recollection. And now that I take up the pen I have no reason to believe my suggestions will have any more practical effect than those of the many who have written before. The question has resolved itself into an "irrepressible conflict," and I can see no solution to the problem, except through the scouring process. Just so long as wool is sold in its unsoured state, whether brook washed or not, there will be debatable ground between buyers and sellers, and in those debates the farmer is the man who generally gets left. For myself I am one of the large majority of wool growers who still adhere to the practice of brook washing—not from choice but through necessity. For at least forty years I have carefully observed the operation of the two systems, and in all that period I will confidently assert that I have known of no instance of a farmer's shearing and selling without washing, who has not lost 25% a fleece by so doing. From the most careful tests I have been able to make, and by comparison with flocks of similar quality, I have found that about one-fifth is what brook washing will take from the weight of the average Michigan fleece. Knowing this to be the fact I long ago determined that for one I would never submit to the buyer's rule of one-third shrinkage, and it has surprised me to see so many farmers of reputed intelligence, who at least know enough to add, subtract and divide, would allow themselves to be fleeced in this way. In making this remark I desire to make exception of one class of wool growers—I mean professional breeders of registered sheep. These men invariably shear without washing, and the reason they do is obvious. First it would spoil their story of extra heavy fleeces, upon which their reputation is based; and secondly, their sheep have been made tender by a system of pampering, from generation to generation, until washing in cold water would greatly endanger their health if not their lives. These men of pampered flocks know very well that they are losing money on their wool by selling it unwashed. Even though they may get a little more money for each fleece than their plebeian neighbors, the difference is in no way commensurate to the supposed superiority of their sheep, and the superior care and keeping bestowed upon them. But what they lose or fail to make on their wool they expect to make with interest through the sale of breeding stock. I do not depreciate the practice for them; it is all right in their business. Nor would I by any means speak disparagingly of the breeders of registered sheep, as a class; Michigan owes much to this class of men—probably more than she is paying them. But the point I would distinctly make is that it is not good for the average farmer to imitate their practices. The "average farmer" is just a little slovenly, not so much through sheer "ignorance and cruelty," as the English farmer John Scriven says in his article in the last MICHIGAN FARMER. On the contrary, this "average farmer," though as I say, a little slovenly, is still possessed of intelligence enough to know that it costs those breeders of pampered sheep at least three dollars for every two they get back in wool and mutton. Consequently this "average farmer" is not fool enough to imitate all their practices. He knows very well that he is never going to sell a buck for \$500, or a ewe for \$200 for the Australian market! His sheep are bred and handled simply for what he can get out of them in wool and meat. The great excellence of the sheep on the farm is that he, like the hog, is a scavenger, gaining his living largely in waste places, and aiding to keep down weeds and bushes, clearing summer fallows, fence corners and the like. We are average farmer to adopt the Vermont plan of housing and blanketing, this scavenger quality would be lost, and the wool would never pay its cost. Now this same average farmer, though constituting forty-nine-fiftieths of the sheep raisers of Michigan, is seldom seen in print. The breeders of registered sheep are the principal writers in the papers, and it is entirely natural that they should write from their own standpoint, but when it comes to the matter of clothing the million we must fall back to the average farmer.

It has now been shown that our Michigan wool growers consist of two distinct classes; and that the rules which govern the one class cannot be made strictly applicable to the other. Also that there are obvious reasons why the breeders of registered sheep should not wash their sheep, while there are equally obvious reasons why the average farmer should wash his. Still I am and for years have been prepared to admit that the brook washing of sheep is all wrong, provided we could find any practical way of avoiding it; but up to the present time it is the only way I have ever found to prevent the manufacturer or his agent from beating me out of at least 25 cents a fleece on all my wools, and I have written this article for the sole purpose of making this practical suggestion: Let the wool growers in the principal wool districts of the State combine, and erect scouring establishments, and sell their product only as scoured wool. This would

bring producer and manufacturer together, and do away with middlemen; it would annihilate all those arguments about shrinkage; it would free the farmer from the imputation of stuffing his fleece with tags and filth, and loading it down with heavy twine, of which the manufacturers have so long complained, not entirely without cause. The wool would then be sold upon its merits, and flocks and flockmasters be freed from the perils of the brook washing process. The oil in the wool might all be saved and utilized, and many thousands of dollars of extra freight money saved, which are now annually paid for freighting the cream of our farms to eastern cities and impoverishing our soils at home. Certainly the expense of a scouring house need not be very great, and when experts are wanted to divide the fleece, preparatory to the scouring process, there should be no fear but they can be found. The great increase of manufacturing establishments throughout the land is daily bringing the grower and the manufacturer nearer together, and their antagonism of interests is thus steadily wearing away.

The readers of the FARMER may take this suggestion for whatever they think it is worth.

OLD GENEESE.

At the May meeting of the Columbian Farmers' Club, Mr. J. S. Flint, of Somerton, put a paper entitled "Silos and Silage," which we give in full. Mr. Flint said:

I wish to preface the subject proper with a brief explanation. Since the April meeting of this club, at the request of the committee on programmes, I have been collecting all accessible facts and information bearing upon the subject "Silage and Silos."

It is a subject upon which not to exceed a dozen men in all Michigan can speak or write from practical experience, and in my search for particulars concerning this system of preparing stock food, I have yet to find a straw which points in a direction leading farmers from entering at once, without hesitation, into the practice. It is without doubt, a safe, practical, and profitable scheme—one of the coming jewels in the catalogue of good things en route for the depressed farmer's relief.

Discussion and investigation will hasten its appearance in our midst, and it therefore follows that some one, not too cautious to step over the line of modesty, should do so and do a little talking, if not from his practical experience, from partly borrowed information, as a "send off."

I wish to thank the committee on programmes for the opportunity to prepare this article. It has caused me to make considerable search through stock journals, agricultural reports and histories, for material from which to draw reliable conclusions. I feel therefore benefited.

My first thought upon the subject was "What is Ensilage?" It is green fodder stored in mass, either in large deep trenches, (if these can be depended on to keep dry) or within stout walls made of wood, stone or brick, the mass being at least several feet in width and depth, and subjected to very heavy pressure from the top. The fodder gradually settles down into a succulent, half solid mass, with a mild "saar kraut" flavor or smell. Careful thought leads me to pronounce feeding ensilage, winter feeding. Where stock is confined to the yard or stable during the summer months, and fed green fodder in its succulent state direct from the field, it is called summer siloing, I therefore term feeding ensilage in winter (which is green fodder preserved in its most succulent state) winter siloing.

France, Germany, and some other portions of Europe, have practiced summer siloing for more than a century. But although they were able to supply their cattle and other stock with green food during the warm season, they were obliged to graze grass and other green food to be given during the winter season. This dry food seriously checked the growth of their animals and also added to the expense of keeping them.

Therefore it is not at all surprising that great effort was made to overcome this obstacle to steady growth. As with us at the present time, they could raise any amount of green food, and if any plan could be devised for keeping it in its succulent condition, siloing should be carried on in winter, or throughout the whole year. These demands led to the origin of the silo. Some parties who wished to preserve the refuse beet pulp of the beet sugar works for future seeding, hit upon the plan of pitting it like potatoes, and found that it could be preserved in this way for many months. It became evident that the only condition necessary was to exclude the air to prevent fermentation. This principle had long before been established in the preservation of perishable fruits in hermetically sealed cans. The only thing to be devised was an economical plan for excluding the air. The pit answered for the beet pulp, and next green corn was pitted, and found to come out with only a moderate degree of fermentation. These pits were dug in the ground, five feet wide at the bottom, seven feet wide at the top, and five feet deep, and as long as was required for the storage of the crop. The corn was carried up above the surface of the ground three or four feet, and straw placed over the top, the earth thrown out of the trench was packed upon the corn, and as it settled

more earth was thrown on to prevent cracking so as to admit air. These rough pits were found to preserve the green fodder with most of its original succulence, and although more fermentation had occurred than was desirable, yet cattle ate it greedily compared with the leaves they ate hay. This mode was continued several years in Germany, and adopted by many in France. It soon became evident that the more solidly it was packed into the pit the better it was preserved.

The next step in improvement consisted in running the fodder through a straw cutter, and cutting it into short lengths of half an inch or less. In this state it is packed much more solidly, and was thus rendered much less penetrable by air and much more could be stored in the same space. When put up in this way and care taken to preserve a solid crust of earth over it, the fodder came out in much better condition, frequently only undergoing saccharine fermentation. Even this rough way was considered a great improvement over drying the fodder. But a most important improvement upon this method was made by Mons. A. Goffart, of France. He desired more certain in its operations than the covering of earth over it. Accordingly he built two parallel walls, air tight, and as far apart as was convenient—from ten to fifteen feet—and eight to twelve feet high. The ensilage was packed between these walls and trodden in closely to the top. Wishing to get rid of the earth, which was liable to get mixed with the feed, he hit upon a cover of planks, placed across the silo, fitting to the wall, but moving down as the body of green ensilage settled. The plank covering was weighted with 500 pounds of stone to the square yard. His movable weight cover, which gave continuous pressure upon the green ensilage, and thus excluded the air, was the last improvement that he regarded as insuring the uniform success of this mode of preserving green fodder. Thus it will be seen that this system of preserving stock food is not of recent discovery. The Austro-Hungarians practiced it more than 50 years before the French turned their attention to it. According to some of the early Roman agricultural writers, grain and fodder were pitted by the Italian farmers at an early period of their history. English experimentalists have also proved that green fodder can be preserved or ensilage, in stacks, with a loss of only about five per cent, or two per cent more than the usual loss in silos. When put up in stacks a powerful press is used to render the mass of sufficient solidity to exclude the air. To sum up and bring this article to a close, I would say:

1st. This system continues the soiling method of feeding throughout the year. A continuous succession of green food may be given our stock during their whole lives. This will offer facilities for producing a much more uniform growth in all our stock. It will simplify our feeding operations, and when fully put in practice will supersede all further efforts to render hay and other coarse fodder more digestible by cooking.

2nd. The system will enable the farmer to carry more stock with less grain, which will save much labor in cultivation of grain crops intended as food for stock. The good book says "all flesh is grass," and feeders often find that stock take on flesh more rapidly on grass than on grain feeding. Hence the necessity of feeding fresh pasture grass, or as near its equivalent as possible.

3rd. Making ensilage instead of curing fodder, lessens the amount of labor. The labor of cutting corn green and storing in the silo will be less than that now required in cutting, curing and storing in the barn.

And whereas a very large percentage of hay is badly damaged by storms and over-ripening, green fodder may always be cut and stored in the silo during the worst season.

4th. The silos in which to store the green food will cost less than barns to store hay, as it is compressed so densely as to occupy much less space. Twelve tons of ensilage will occupy the space of one ton of hay; from two and a half to three tons of ensilage is estimated to be equal to one ton of the best hay in feeding value. Eighteen tons of ensilage, the product of an acre, means a loss of only about five per cent, or two per cent more than the usual loss in silos.

5th. This system of feeding will be highly applicable in the colder States, as the season of winter feeding is there much longer and more trying to the constitution of the animals. In the colder northern States cattle make excellent progress on good pasture, but much of this is lost during the long cold winter, when they are confined in the ration of all domestic animals because of the large weight grown upon an acre, and because it is a great flesh producer and highly relished by all farm stock. Corn mixed in the silo with Hungarian grass or millet would make very nearly a complete ration. Second growth clover might be added to advantage, and all three ensilaged together, will be a valuable ingredient in the ration of all domestic animals because of the large weight grown upon an acre, and because it is a great flesh producer and highly relished by all farm stock.

Corn raising without stock means a constantly deteriorating soil, and an inevitable impoverishment of our resources. The system of ensilage feeding may be made the means of carrying a much larger proportion of stock in grain raising States, as every acre of land treated under this system will represent three acres under the old system. The 100 acre farmer, under this system, if the statements of men and writers whom I have consulted are reliable, and judging from their standing we have no reason to dispute, has as great a carrying capacity for stock as the 300 acre farmer under the old system. One thing cannot be "rubbed out;" in improvements and improved methods lie the farmer's only hope for future prosperity. In the avenues of every line of business other than farming, intelligence and improvements of the highest order lead the van of progress. I trust I have not drawn a fancy picture which will never assume a more tangible form than this ill-arranged article. I acknowledge that the more thought I give to the subject the greater is my desire that the universal adoption of the silo will hasten, I believe it will."

MR. H. V. PUGSLEY, the well-known breeder of Merino sheep at Plattsburg, Mo., had a flock of 117 attacked by dogs recently, and 65 of the lot either killed or crippled. Forty-eight grown sheep were killed outright, besides a number of lambs, all regrettably dead by Indiana Blooded Stock Co., to W. Crapo, Plano, Ill.

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The Horse.

Dates of Trotting Meetings in Michigan
for 1888.

KALAMAZOO.....	June 26 to 29
JACKSON.....	July 3 to 6
MUSKEGON.....	July 10 to 13
GROSSE ILE RAPIDS.....	July 17 to 20
BELLEVILLE.....	July 24 to 27
DETROIT.....	Sept. 4 to 7
Detroit.....	Sept. 18 to 21
CENTERVILLE.....	Sept. 24 to 26
LANSING.....	Sept. 24 to 26

SEPTEMBER ENTRIES OF THE DETROIT DRIVING CLUB.

The Detroit Driving Club will hold a fall meeting Sept. 4th to 8th inclusive. At this meeting special stakes have been arranged for two, three and four-year-old trotters. The stakes have been contributed by some of Detroit's enterprising men, who take an interest in good horses and wish to see Michigan take advanced ground in breeding the trotter. The list of entries for these stakes is as follows:

THE J. L. HUDSON STAKES FOR TWO-YEAR-OLDS,

c. B. Tracy, b c Son, b f Asbury, by Kentuck Whisker, dam by Truiman; b f Anderson, by Oxford Diamond Jubilee; b f Africa by Manz Brino Dudley, dam Estra.

Briar Hill Stock Farm, b c Egerton, by Beatrice, Nebraska, to which place he is being taken. Linden Tree is now 13 years old, was foaled in the Desert of Sahara, is a silver gray in color, beautifully proportioned, but kept entirely too fat. He is 15 hands high and weighs about 1,000 lbs., which shows him to be larger than usual with Arabians, their height being from 14 to 14½ hands. Linden Tree is of undoubted purity of blood, his pedigree running back nearly a thousand years, and of one of the most noted families of the breed. Perhaps the finest points about the horse are his beautifully moulded head and neck, his clean, symmetrical limbs, and his feet, which appear to be simply perfect. He is very docile and intelligent, and would make an elegant saddle horse.

of each association. Another event of the season will be the pacing race for horses of the 2:17 class. The race will be under saddle. A double team race will be a feature. It will be free-for-all. It is optional with the managers of each track whether the race be run in double harness or tandem. The total amount of the circuit's purse money will not fall much short of \$200,000, although the sum stated is \$182,000. The purses range from \$1,000 to \$2,000, each point arranging that matter to suit itself, and some of them will offer extra purses for special events.

ONE of the interesting events of the week to horsemen was the visit to the stock farm of Senator Palmer of the Arabian stallion Linden Tree (Zeizefoun), presented to General Grant by the Sultan of Turkey in 1879. This horse has been purchased from the Grant estate by Gen. L. W. Colby, of Beatrice, Nebraska, to which place he is being taken. Linden Tree is now 13 years old, was foaled in the Desert of Sahara, is a silver gray in color, beautifully proportioned, but kept entirely too fat. He is 15 hands high and weighs about 1,000 lbs., which shows him to be larger than usual with Arabians, their height being from 14 to 14½ hands. Linden Tree is of undoubted purity of blood, his pedigree running back nearly a thousand years, and of one of the most noted families of the breed. Perhaps the finest points about the horse are his beautifully moulded head and neck, his clean, symmetrical limbs, and his feet, which appear to be simply perfect. He is very docile and intelligent, and would make an elegant saddle horse.

Horse Gossip.

RAY WARNER'S colt Master is reported by the Coldwater Republican to have gone a mile recently in 2:55.

It is said that the only two race-horses in the United States that ever won over \$100,000 are Miss Woodford, by Billed, and Hanover, by Hindoo.

SILVERTHREAD, the pacer, won a race at Goshen, N. Y., last week, which took six heats to decide. He took the second heat in 2:23, third in 2:22, and the sixth in 2:23.

H. J. GREEN, of Stockbridge, has recently purchased of Dowey & Stewart, of Owosso, the young stallion Eugene Wilson 5293, by Don Napoleon; dam: Anna, by Almont; b f Don Cossack, by Don Cossack, dam Dora H., by Forest Goldmine.

Penn Valley Stud, ch. Ashwood, by Nutwood, dam Flora Abdalibah; b f Scribble, by Jay Gould, dam Sora.

Cato Stock Farm, b c Rostock Cossack, by Don Cossack, dam Almonia, by Almont; b f Don Cossack, by Don Cossack, dam Dora H., by Forest Goldmine.

T. D. Hoopes, b k C. American Girl, by Superior, dam: Bessie.

Edge Hill Stock Farm, b c Lord Howland, by Gen. Wilkes, dam Louis Howard.

Cato Stock Farm, b c Rostock Cossack, by Don Cossack, dam Anna, by Almont; b f Don Cossack, by Don Cossack, dam Dora H., by Forest Goldmine.

E. W. Prior, b c San Maio, by Nuggett, dam Zeeline.

Edgewood Stock Farm, b c Hussar, by Jerry Wilkes; dam Lady Switzer, by Walkin' Chef.

Walter Clark, b m Little Williams, by Pilot Medium, dam by Jefferson Mambrino; b f Pilot K., by Pilot Medium, dam Indianapolis, by Tatier, a son of Pilot Jr.

A. C. Fisk, b c Latitude, by Walsingham, dam Kitty P., sister to Trinket, by Principe.

THE HOTEL CADILLAC STAKES FOR THREE-YEAR-OLDS.

B. F. Tracy & Son, ch. b Mambrino Duder, by Mambrino.

A. B. Donelson, b c Aglet, by Agile, dam by Golden Bow.

George A. Fuller, b c Maxon, by Kentucky Prince, dam Nine, by Messenger Durco.

Baily & Morris, ch. f Leda (formerly Baily) by Pilot, Champion, dam Gypsey, by Stephen A. Douglas.

Mulberry Stock Farm, b c Director's Jug, by Director.

B. J. Stanford, b c Francis Fauns, by Dan Campan, dam Daisy Cupper, by Cupid, Edgehill Stock Farm, b c General Blackford, by General Wilkes, dam Molie Blackford.

A. C. Fisk, b c Whippet, by Hambletonian Sultan, dam Minnie, by Beld Chief; ch. f Laure Belle, by Belmont, dam Laura, by Joe Hooker; ch. f Soc, by Socrates, dam Lucy Thorne, by Madison, Thomas.

Watkins Park, g c Pilgrim, by Pilot Medium, dam by Jefferson Mambrino; b c Calumet, by Pilot Medium, dam by Bay Middleton; gr. g Carl Hodges, by Pilot Medium, dam by Shelly Chief.

Fred Groves, sr. & Grover Cleveland, by Sovereign, dam King P.

THE B. STROH BREWING COMPANY STAKE, FOR FOUR-YEAR-OLDS.

C. C. Pond, W. H. C., by Young Jim, dam by Rotheshild.

J. T. McKenna, b c Momus, by Margin, dam by Olympia.

B. F. Tracy & Son, b c Fairfax, by Mambrino Dudley, dam Lady Moore.

F. B. Gaither, b c Glenmore, by Edmore, dam Minnie, by Norwood.

M. L. Smith, b m Molie B., by Montgomery, dam by Olympia.

Roxbury Stock Farm, b c Gypsy Wilkes, by Young Jim, dam by American Clay; b c Erie Patchen, by Erie Mambrino, dam by Enquiry.

Cato Stock Farm, b c King Cossack, by Don Cossack, dam May Queen, by American Clay.

Fred Groves, b m Molie B., by Sovereign, dam Kitty P.

Forest City Farm, br. b Heckothrift, by Hermetta, dam Katie Middleton.

E. J. Travis, b k Bessie P., by Lumps, dam by Olympia.

Walter Clark, gr. m Minerava, by Pilot Medium, dam by Daniel Lambert; gr. c Tyrolean, by Pilot Medium, dam by Bay Middleton.

KIRKWOOD.

SOUTH HAVEN, May 25, 1888.

To the Editor of the Michigan Farmer:—Will you please inform me through your paper with regard to the trotting stallion Kirkwood, his pedigree, number in register and record, date when foaled, and oblige,

SUBSCRIBE.

Kirkwood's registered number is 198. His breeding is as follows: Kirkwood, brown horse; foaled 1860; got by Green's Bashaw; 50 dam; by Young Green Mountain Morgan, a son of Hale's Green Mountain. Green's Bashaw was by Verno's Black Hawk, a son of Black Hawk 34; dam Belle, by Webster's Tom Thumb; gr. g, dam, "Charles Kent man" (dam of Hambletonian 10), by imp. Bellfounder; gr. g, dam, One Eye by Bishop's Hambletonian, son of imported Messenger. Kirkwood has three in the 30 list, and his son Sam Kirkwood has two. His best record is 2:24. Kirkwood was bred by D. R. Warfield, Muscatine, Iowa, and became the property of H. D. Compton, same place, who afterwards moved to Pontiac, Mich., and brought the horse with him. From there he went to Jersey City, N. J.

The Grand Central Circuit.

The stewards of the Grand Central Trotting Circuit met in the city of New York recently, and decided upon the dates for the circuit meetings. They are as follows:

Cleveland, July 1 to Aug. 3, inclusive.

Buffalo—Aug. 7 to 10, inclusive.

Rochester—Aug. 14 to 17.

Utica—Aug. 21 to 24.

Albany—Aug. 28 to 31.

Hartford, Sept. 4 to 7.

Springfield—Sept. 11 to 14.

New York—Sept. 18 to 21.

The circuit decided to give a free-for-all

pacing race, with Johnston barred, and that it be one of the events of the season

The Remarkable Cures

which have been effected by Hood's Saraparilla are sufficient proof that this medicine does possess peculiar curative power.

In the several cases of scrofula or salt rheum, when other preparations had been powerless,

the use of Hood's Saraparilla has brought about the results. The case of Miss Sarah C. Whitney, of Lowell, Mass., who suffered terribly from scrofula sores; that of Charles A. Roberts, of East Wilson, N. Y., who had thirteen abscesses on his face and neck; that of Willis Duff, of Walpole, Mass., who had his disease and scrofula so bad that physicians said he could not recover, are a few of the many instances in which wonderful cures were effected by this medicine.

The Farm**CANADIAN CHEESE-MAKING.**

System of Cheese-Making Pursued in the Allegheny Cheese Combination of Seventy Factories.

In a trade circular issued by D. H. Burrell & Co., of Little Falls, Herkimer Co., N. Y., we find the following description of the system of cheese-making followed by the Allen Grove Cheese Combination of Lancaster, Ont., given by the Inspector and Manager, Mr. J. A. Rudder:

"Received nothing but pure sweet milk, set at 84 to 86 degrees, using enough of rennet to form coagulation in fifteen minutes. The mixing of the rennet should be thoroughly done and stirring kept up for five minutes; begin cutting in about forty minutes, or when the curd breaks over the finger clean and sharp. All the cutting is done at once and the stirring begins immediately, the sooner the better, and very gently. The heating is also begun at once, but very light at first, gradually increasing the amount of steam as fast as the whey forms out of the curd. The rule established, in stirring the curd, is to stir just fast enough to keep the curd from the surface of the whey at all parts of the vat; as more whey forms, increased agitation is needed. Following this rule prevents any particles of curd resting on the hot tin; should this happen it would cause a permanent injury to the quality of cheese. The stirring must be kept up for ten to fifteen minutes after the temperature has been raised to 97 or 98 degrees; at no time should the curd be heated over 98 degrees; no stirring is done until after the whey is drawn, which is usually done at the first appearance of the acid change. If the curd is firm and squeaks between the teeth, it is then stirred thoroughly once over the whole vat; if not, it shows it is too soft, and stirring should be kept up until it gets sufficiently firm, then it should be allowed to mat over the bottom of the vat, cut into pieces and turned over at the same time. A cover is used over the vat all seasons of the year to keep up a uniform heat in the curd. After one or two hours the curd is passed through the Macpherson curd mill, which cuts it into thin, narrow strips of uniform size, and if the curd is porous it is passed twice through this mill, so as to liberate the gases and expose as much surface as possible to the air. Stirring of the curd is then kept up for one hour by the hand, after which the salt is applied and well mixed in, at the rate of two to two and a half pounds of salt to 100 pounds of curd; the curd is then heated for one hour, for the salt to penetrate and distribute evenly; it is then put to press in even sized cheese, squarely pressed, lightly at first, gradually increasing the pressure every half hour until the full power is applied—taken out of press and turned the following day. The cheese is removed to cure room and bandage neatly and in quantity. I also had part of my field corn picked and put in stover in the silos. This is a very quick way of harvesting, and if the corn is not laid too thick it will dry well. If there is much rain take a fork and turn it over."

As to the manner of feeding I do not know of any changes. I always feed after milking, and have never had any complaint from bad taste. Mr. Clemente and myself sell as good milk as any dealer around and have the best customers in the village. In this connection I might say that Mr. Clemente and myself have a small derrick and a box on wheels, which one man can handle. This saves much work and time in feeding ensilage.

"Bran is so high that I am not feeding any this winter. My sweet corn was well matured and cut early, so that I have a very rich fodder. After each feeding of ensilage the cows have all the dry hay they can eat, which takes the place of bran. I have been in the habit of planting yearly large southern corn near my barn where the carting would be slight. Further away from the barn I planted some sweet corn. It ears beautifully (two ears on many stalks), and being on drier ground the roots held firmer and it was not so easily blown down. I am inclined to think I got nearly as much in value as with the larger kinds. Mr. Clemente raises nothing but sweet corn, and thinks he makes up in quality what he lacks in quantity. I also had part of my field corn picked and put in stover in the silos. This is a very quick way of harvesting, and if the corn is not laid too thick it will dry well. If there is much rain take a fork and turn it over."

It is said that Orrin Hickok will not come east with his horses this week, but will remain in California this season. Now if Spain and a few more of the same sort will go over and visit Hickok and stay there the rest of the season, there will be a chance for the public to see some square trotting races. It is about this time these men were retired from the track in the interest of honest sport.

COLDWATER REPUBLICAN: To get a fair estimate of the amount of money left in the county for horses we would find the following statistics: Combination sale (in which mostly all sold were sold outside the county), \$20,000; L. M. Gray, buyer, \$15,000; Pavitt, Eschbach, Repard Brothers and others, buyers, \$15,000, making a total of about \$50,000 paid for horses raised, owned and sold in Branch County since January 1, 1888; certainly quite a large sum.

THE GRAND RAPIDS TROTTING ASSOCIATION has added four stakes to its regular programme. The two-year-old stake will be half-mile heats, two in three. The three and four-year-old stakes will be mile heats, three in five. Only horses with no records are eligible in the four-year-old class. There is also a stake for green roadsters, owners to drive. The entrance to each stake is \$20; \$10 of which must accompany the nomination on June 25, and the balance on or before July 9.

THE B. STROH BREWING COMPANY STAKE, FOR FOUR-YEAR-OLDS.

C. C. Pond, W. H. C., by Young Jim, dam by Rotheshild.

J. T. McKenna, b c Momus, by Margin, dam by Olympia.

B. F. Tracy & Son, b c Fairfax, by Mambrino Dudley, dam Lady Moore.

F. B. Gaither, b c Glenmore, by Edmore, dam Minnie, by Norwood.

M. L. Smith, b m Molie B., by Montgomery, dam by Olympia.

Roxbury Stock Farm, b c Gypsy Wilkes, by Young Jim, dam by American Clay; b c Erie Patchen, by Erie Mambrino, dam by Enquiry.

Cato Stock Farm, b c King Cossack, by Don Cossack, dam May Queen, by American Clay.

Fred Groves, b m Molie B., by Sovereign, dam Kitty P.

Forest City Farm, br. b Heckothrift, by Hermetta, dam Katie Middleton.

E. J. Travis, b k Bessie P., by Lumps, dam by Olympia.

Walter Clark, gr. m Minerava, by Pilot Medium, dam by Daniel Lambert; gr. c Tyrolean, by Pilot Medium, dam by Bay Middleton.

KIRKWOOD.

SOUTH HAVEN, May 25, 1888.

To the Editor of the Michigan Farmer:—Will you please inform me through your paper with regard to the trotting stallion Kirkwood, his pedigree, number in register and record, date when foaled,

Horticultural.

Garden Vegetables.

Many of our most useful garden vegetables have a remote origin. The pea was introduced from Egypt and Syria into Europe in the 12th century. The bean grew abundantly in northern Africa and on the shores of the Caspian Sea before the commencement of botanical history. Pliny speaks of a turnip whose single root weighed forty pounds, of three shoots of asparagus grown at Rovenna that weighed a pound, and of the beet as an "eatable product." Dicroides alludes to the carrot, "as reared in gardens for its esculent root." The ancient Germans and Romans cultivated the cabbage quite commonly. The native cauliflower of the island of Cyprus was a rarity in England at the beginning of the 17th century. The west of Asia is made the native land of the spinach, which was found in A.D. 1351, in a list of vegetables consumed by the Spanish monks on fast days, and as a food plant in Great Britain in A.D. 1568. The Egyptians have had a familiar acquaintance with the onion for forty centuries. The lettuce was sent to England from the Greek Islands, and in 1550 the gardener of Henry VIII received a reward for introducing this delightful salad plant. The parsnip originally came from Britain, the radish from China, rhubarb from Tartary, parsley from Sardinia, the potato from Chile and was carried first to northern Europe in Elizabeth's reign by Sir Walter Raleigh on his return from South American discoveries, but was grown in Spain at an earlier date. The introduction of these several products is sufficient proof that vegetables were a primary source of sustenance to a remote people to whom we are indebted for the salient luxuries of the present day, and these delicacies that afforded us satisfactory gratification in their season a few years ago, are now demanded in every variety that can be obtained throughout the year.

Spring is the season when subjects relating to market gardening particularly engage the attention of the cultivator. The selection of varieties and best methods of their growth, the locating, laying and draining of the plots, the choice of seeds, and best way of utilizing them, rotation of crops and proper way of keeping them, are all topics that can be profitably discussed. This is the time, too, while maturing plans, to determine what new methods to adopt for spring work, and what new varieties, new implements and new fertilizers are really better than those that have been in former use. Purity of seed is of paramount importance in vegetable gardening, and too early sowing is often a cause of failure. Excess of moisture beyond that which a well-drained soil will naturally hold hinders free access of air, which performs an important part in the complex chemical changes that take place in the seeds. Suitable soil, plenty of fertilizers and clean culture are also important necessities. A rich, friable, sandy loam in a naturally dry location is all that is desired, and if supplied with decayed vegetable matter the earlier will be the crops. Deposits of peat and swamp mud can be utilized and afford a large source of fertilizing matter. A garden that contains about one foot of good rich soil is to be generally relied upon for a supply of a variety of vegetables adapted to family purposes.

The quality of our garden vegetables and methods of their growth have improved very much during the last two decades, although sweet corn and potatoes may be exceptions to the above declaration. No potato now rivals the little Hebron for cooking, or the small hill's sweet corn for delicacy, but our carrots, onions, squashes and tomatoes are fine, clear and handsome; our cauliflower, lettuce and celery solid and white, turnips like balls of wax, all of which owe their beauty to good soils and careful culture. Their enlarged growth must continue to be an extending line of business and a profitable industry so long as careful scientific investigation aids us to discover new methods of rapid vegetation and increased production at a reduced cost. Market garden vegetables cannot be luxuriantly cultivated at the present day on thin and poor land. The sciences have assisted us very much in locating the kind of soils that are best adapted to the wants of the vine, the tuber and the bulb of sweet roots and leguminous or aceraticious plants.—*Rural Home.*

Fruit Garden Favorites.

Among the old strawberries none please me so well as the Downing. There are more highly flavored varieties and those more beautiful, but there is something in the quality of the Downing that leads me each season to the spot where it grows. Under good culture it is large and productive, and in some localities it is subject to leaf blight, but, so-called, caused by a fungus growth.

Next to the Downing for an amateur I would place Mt. Vernon. It is attractive in flavor, productive and vigorous, but too soft for market. This, like many others, has been overlooked by many, in the crowd of new varieties that have been offered, yet it has friends everywhere, and will be planted more and more each season by those who appreciate a good strawberry. Triumph, Gandy and Jersey Queen are both superior in quality to either Downing or Mt. Vernon, but usually will not yield half as much fruit, and in many localities are exceedingly fickle. Indeed, the Durand strain of strawberries, to which Jersey Queen belongs, has proved uncertain with me as a rule, and also with many others. Parry and Jewell, of the same strain, while among the best of the family, are variable, the Jewell far more so than Parry, the latter proving to be a valuable early variety in many localities. It varies greatly in quality, however, in the same row the same day, a peculiarity which I have not noticed in any other variety. Among the newer varieties Jessie excels in quality united with productivity, and Bachman in size, beauty and vigor.

It is a disputed question whether strawberry beds should be cultivated during the spring, or bearing season, but weeds must be subdued, and shallow hoeing early in the season does no harm. Where the winter mulch is left between the rows it has a tendency to cause later ripening and increases the danger from frost, but otherwise the mulch is beneficial. If the soil is not fertile enough commercial fertilizers may

be applied by hand, if care be taken not to permit them to touch the foliage. They should be mixed with the soil at once with the hoe. The strawberry is a good feeder, and wood ashes, nitrate of soda, common phosphates, or almost any fertilizer will be acceptable.

Commercial fertilizers are very useful and may be applied with advantage to many crops, but, as a rule, the common farmer had better use them sparingly, in connection with barn manure, until he learns the powers of the different qualities and the wants of each particular field to be planted and crop to be grown.—*Practical Farmer.*

Insects in the Plum Orchard.

Miss F. M. Mulfeldt, who is well known as a practical and well posted entomologist, answers an inquiry in the *Rural World* relative to the insects that infest plum trees, as follows:

The principal insect enemies of the plum, which was found in A.D. 1351, in a list of vegetables consumed by the Spanish monks on fast days, and as a food plant in Great Britain in A.D. 1568. The Egyptians have had a familiar acquaintance with the onion for forty centuries. The lettuce was sent to England from the Greek Islands, and in 1550 the gardener of Henry VIII received a reward for introducing this delightful salad plant. The parsnip originally came from Britain, the radish from China, rhubarb from Tartary, parsley from Sardinia, the potato from Chile and was carried first to northern Europe in Elizabeth's reign by Sir Walter Raleigh on his return from South American discoveries, but was grown in Spain at an earlier date. The introduction of these several products is sufficient proof that vegetables were a primary source of sustenance to a remote people to whom we are indebted for the salient luxuries of the present day, and these delicacies that afforded us satisfactory gratification in their season a few years ago, are now demanded in every variety that can be obtained throughout the year.

Patrick Barry used to say that the quality of a black raspberry was hardly worth considering, but I think he would not say so now, for the varieties differ greatly. Mammoth Cluster is among the best, and Gregg is most deficient in quality. Red raspberries differ in quality as much as apples. There are few who enjoy the better varieties, as they are not hardy, but they can be easily protected. Franconia possesses many of the good qualities of the better class of red, and Brinckle's Orange of the yellow. In blackberries the old Lawton and Kittatinny have not been excelled in size and quality, but it must be remembered that they are seldom permitted to ripen fully. If eaten as soon as colored they suggest sips of vinegar or lemon juice, but a week later they soften and are as sweet as wild honey.—*Chas. A. Green, in Philadelphia Press.*

Commercial Fertilizers vs. Stable Manures.

Since the introduction of commercial fertilizers there has existed in the minds of many farmers a doubt as to the value of a cord of stable manure, when compared to the market price of commercial fertilizers, and farmers differ widely on this subject; while one believes stable manure to be worth \$8 per cord, another does not believe it worth half that sum, and will buy commercial fertilizers in preference, even when he can buy the manure at \$4 per cord. Why this difference of opinion? Because there is a great difference in the action of commercial fertilizers and stable manure that is often overlooked. The moment the farmer commences to use concentrated fertilizers, that moment he has entered upon a work that requires a higher intelligence to enable him to use it to the best advantage than it does to use stable manure.

There are many variations to be considered in using commercial fertilizers that without intelligent application the result will be entirely uncertain. In the first place commercial fertilizers are in a concentrated form, and are made up of materials, some of which are very quick acting and others very slow, some of which are soluble in water and some are not. In the second place there is a great difference in the composition of these fertilizers; one may be made up with a small percentage of nitrogen; another may have a small percentage of potash and a large percentage of nitrogen; and still another may have a large percentage of phosphoric acid with a very small percentage of either nitrogen or potash, and, finally, a fertilizer may be made so as to contain a large percentage of both phosphoric acid and nitrogen, but both so locked up with other materials that the plants will be able to get but small portions of them for several years after the fertilizer has been applied. Thus it will be seen how important it is that, whatever fertilizers are to be applied, in buying them enough intelligence should be used to ascertain not only whether they contain phosphoric acid, potash and nitrogen in proper proportions needed for the particular crop to be grown, but also to ascertain whether these substances are in a form to be available for plant food at the time they may be wanted by the growing crop. If a crop of Indian corn is to be grown without anything but commercial fertilizers, it would not be wise to buy all superphosphate, because the plant food in it being soluble in water it would be immediately available for plant food, and it would force a growth of leaves and stalks in the first part of the season at the expense of the grain at the last part, but if ground bone and muriate of potash be applied, two-thirds of the former to one of the latter, a more equai growth would be obtained, because the ground bone would slowly advance to plant food, and at the time wanted by the growing grain would be in good condition to furnish just what the crop would need.

When stable manure is applied the farmer does not have to exercise so much judgment because the manure contains the different elements of plant food in fair proportions, and while some of it is immediately available for plant food, much of it is not; but it advances and furnishes plant food through the growing season as the crop may demand, providing the season be a good one, and a sufficient quantity of manure be applied. But there is another difference between commercial fertilizers and stable manure that is very often overlooked, yet it is of very great importance, that is its action on the soil while in the process of decomposition; it generates a large amount of carbonic acid; this, or some other substance that is liberated during the process of decomposition, no doubt acts on the soil to an extent that liberates considerable quantities of plant food that had been locked up in the soil, so that, although a cord of manure contains nitrogen, phosphoric acid and potash worth less than \$3, the action of the manure on the soil liberates from it enough more of these elements to make it worth, on many soils, at least twice \$3, but there are some soils that have been so decomposed that they have

become deficient in both phosphoric acid and potash so that whatever may be applied to them but little more can be extracted; on such soils concentrated fertilizers can be applied with more profit than barn manure.

Commercial fertilizers are very useful and may be applied with advantage to many crops, but, as a rule, the common farmer had better use them sparingly, in connection with barn manure, until he learns the powers of the different qualities and the wants of each particular field to be planted and crop to be grown.—*Practical Farmer.*

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Protecting Young Melon Plants.

W. F. Brown, in the *Philadelphia Press*, says: I have a neighbor who is growing several acres of watermelons; early in the season he began making wooden boxes with muslin tacked over the top to protect vines from bugs. He found them expensive, troublesome to handle and bulky to store, and finally tried a fourth yard of muslin and four stakes for each plant, and finds it furnishes a protection from bugs, as well as from cold winds and frost. A spike should be driven into the trunk of the tree, or a block tacked against one side upon which to strike, otherwise the bark and sap-wood would be injured by the repeated blows, and the attacks of borers invited.

In jarring a large orchard, some contrivance like Dr. Hull's Curculio Catcher would greatly facilitate the work. This implement consists of a large inverted umbrella of white cloth, adjusted to a wheelbarrow. There is an opening in the further side to admit the trunk of the tree, which is jarred by the sudden contact of the back of the wheelbarrow.

Poisons have not hitherto been much used on the plum curculios, but spraying the trees with Paris green and London purple in liquid suspension, one and one-half ounces of the former and three ounces of the latter to five gallons of water, and also with solutions of white arsenic, one ounce to fifteen gallons of water, has been found beneficial and will be extensively practised by fruit growers this season. The application is made by means of a force pump with spray nozzle or some similar implement.

The jarring process should begin when the trees are in blossom, and be continued, daily if possible, for three or four weeks. The arsenical remedies should not be used after the fruit is more than half grown, to avoid danger to the consumer. All the larger animals and chickens should be excluded from orchards upon which these preparations are used, and the utmost care should be observed in handling them.

Culture of Tomatoes.

A correspondent of the *Ohio Farmer*, who grows large crops of tomatoes for market, gives his method of culture:

I grow all my plants in hot-beds. My manure is bought in town and is very rich, so you may know the heat is very intense, so you may know the heat is very intense. I throw enough together at home to make as well as from a box two feet square and a foot deep. I recommend every gardener to adopt this plan for the protection of cucumbers, melons and squashes. On the morning of May 15th we had a severe frost, which froze potatoes and early beans to the ground. Strips of muslin stretched over the rows would have saved my early vegetables, and their use for one night would have paid the cost. The squares used for melons would do to protect tomato plants, and if laid double would not need stakes or stretching, as a frosty night is usually a still one and there would be no danger of their blowing off.

Will it Answer?

Mr. W. S. Young writes as follows to the *Indiana Farmer*:

I have frequently noticed an item going the rounds of the newspapers relating to a remedy against the ravages of the gooseberry and currant worms, saying that the only true remedy is to use powdered white lead, chalk, etc., to cover the bushes. I have a remedy which, with me, has proved effectual, and is certainly very simple and not in the least dangerous to poison. I have used it for ten years, and my gooseberry and currant bushes remain throughout the growing season as green and luxuriant as anything else of the kind.

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to say is: Change the address on MICHIGAN
FARMER from — Postoffice to — Postoffice,
your name in full,



DETROIT, SATURDAY, JUNE 9, 1888.

This Paper is Entered at the Detroit Post-
office as second class matter.

WHEAT.

The receipts of wheat in this market the past week amounted to 46,231 bu., against 37,675 bu. the previous week, and 87,550 bu. for corresponding week in 1887. Shipments for the week were 42,016 against 53,217 bu. the previous week and 97,442 bu. the corresponding week in 1887. The stocks of wheat now held in this city amount to 306,040 bu., against \$31,760 bu. last week and 192,331 bu. at the corresponding date in 1887. The visible supply of this grain on Friday was quoted with light demand. Quotations for American wheat are as follows: No. 2 winter, 6s. 8d. @ 6s. 9d.; No. 2 spring, 6s. 8d. @ 6s. 9d.; California No. 1 6s. 5d. @ 6s. 10d.

the other direction it is reported that the wheat in Tennessee has been struck by rust, and that is a mischievous extent of damage caused by which does not come out till harvest time. So far Kansas is the only State that gives promise of a good crop of wheat this year, and the countries of Europe appear also to be troubled with a backwardness of season that is far from auguring a good harvest yield."

The Missouri Agricultural Department places the crop of that State at 64 in condition against 77 a month ago, when the latter figures were estimated to mean a crop of about 14,000,000 bu. on a much decreased acreage of winter wheat.

Reports from Pittsfield and Logan County, Illinois, say the yield of wheat in the southern half of Illinois will scarcely be more than half a crop.

The following table shows the quantity of wheat "in sight" at the dates named, in the United States, Canada, and on passage to Great Britain and the Continent of Europe:

	Bushels
Visible supply	29,022,328
On passage for United Kingdom	18,088,000
On passage for Continent of Europe	3,672,000

Total bushels May 19, 1888	50,982,228
Total previous week	50,888,771
Total two weeks	50,785,518
Total May 21, 1888	62,442,887

The estimated receipts of foreign and home-grown wheat in the English markets during the week ending May 20 were 548,400 bu. less than the estimated consumption; and for the eight weeks ending May 12 the receipts are estimated to have been 5,554,480 bu. less than the consumption. The receipts show a decrease of 4,502,920 bu. as compared with the corresponding eight weeks in 1887.

Shipments of wheat from India for the week ending May 26, 1888, as per specimen cable to the New York Produce Exchange, aggregated 1,820,000 bu. of which 1,140,000 was for the United Kingdom and 680,000 to the Continent. The shipments for the previous week, as cabled, amounted to 1,140,000 bushels, of which 500,000 went to the United Kingdom and 640,000 to the Continent. The total shipments from April 1, 1888, which was the beginning of the crop year, to May 26, 1888, have been 7,120,000 bu., including 2,840,000 bu. to the United Kingdom, 4,280,000 to the Continent. The wheat on passage from India May 14 was estimated at 3,056,000 bu. One year ago the quantity was 3,440,000 bu.

The Liverpool market on Friday was quoted quiet with light demand. Quotations for American wheat are as follows: No. 2 winter, 6s. 8d. @ 6s. 9d.; No. 2 spring, 6s. 8d. @ 6s. 9d.; California No. 1 6s. 5d. @ 6s. 10d.

CORN AND OATS.

CORN.

The receipts of corn in this market the past week were 13,650 bu., against 51,878 bu. the previous week, and 15,854 bu. for the corresponding week in 1887. Shipments for the week were 20,528 bu., against 27,088 bu. the previous week, and 10,453 bu. for the corresponding week in 1887. The visible supply of corn in the country on June 2 amounted to 9,310,453 bu. against 8,368,360 bu. the previous week, and 12,709,812 bu. at the same date in 1887. The visible supply shows a decrease from the amount reported the previous week of 1,244,039 bushels. As compared with a year ago the visible supply shows a decrease of 16,025,445 bu.

The week closed with the wheat market quiet in tone and rather weak. As compared with a week ago values are somewhat lower on both spot and futures. Late futures are relatively the strongest, spot and near futures showing weakness, and a decline is noted on them from the prices of Thursday. Chicago is lower, and New York also, the decline being from 3c to 3c in each case. Rumors yesterday were to the effect that the government report for June put the condition of the crop at 69 per cent.; last month's estimate was 73. If this turns out to be correct the market will probably "brake up" again. One point of weakness, however, is the dullness of foreign trade, and the increase in the exports from India. Liverpool and London were both very quiet yesterday, spot wheat, however, being less firm than futures.

The following table exhibits the daily closing prices of spot wheat in this market from May 15th to June 8th, inclusive:

No. 1 White.	No. 2 Red.	No. 3 Red.
May 15.....	96%	95%
16.....	90%	97%
17.....	90%	97%
18.....	99%	96%
19.....	98%	95%
20.....	98%	95%
21.....	98%	95%
22.....	96%	95%
23.....	96%	95%
24.....	98%	94%
25.....	98%	94%
26.....	98%	94%
27.....	97%	94%
28.....	96%	94%
29.....	96%	94%
30.....	96%	94%
31.....	96%	94%
June 1.....	96%	94%
2.....	96%	94%
3.....	96%	94%
4.....	95%	94%
5.....	95%	94%
6.....	95%	94%
7.....	95%	94%
8.....	95%	94%

For No. 2 red the closing prices on the various days each day of the past week were as follows:

June.	July.	Aug.
Saturday.....	50	50
Monday.....	90%	94%
Tuesday.....	90%	94%
Wednesday.....	90%	94%
Thursday.....	90%	94%
Friday.....	90%	94%

The crop outlook in Europe is only fair. The season is backward, the weather cold, and vegetation progresses slowly. In Germany the weather has been very changeable, but latest mail advices showed some improvement. There are few complaints as to wheat beyond its general backwardness, but there are many complaints relative to the rye crop, owing to the severe weather of the winter and early spring.

In Belgium the position of the wheat crop is reported to be healthy and satisfactory, but very backward for the season. Reports from Holland are much to the same effect; reserves in the latter country are very small.

In Austria-Hungary winter wheat is reported to show a little improvement, but is still far from satisfactory, the plant being weak and thin. Reports as to rye are also unfavorable, and the crop promises to be a poor one.

The colonies of South Australia, Victoria, New Zealand and New South Wales produce practically all the wheat grown in Australasia, less than a million bushels being grown in the remaining colonies. Taking the official reports from Victoria and New South Wales and commercial estimates as to South Australia and New Zealand, the 1887-8 wheat crop is placed at 42,527,905 bu., against 34,766,518 bu. in 1886-7. It would seem therefore, that Australia's surplus is allowing for increase in population, about 7,500,000 bushels larger than last year. Aladed by easier freights South Australia has been shipping wheat quite freely, the total from January 1 to April 5, being about 100,000 tons.

The Chicago Tribune of Thursday says:

"A temperature ranging among the thinnest in the northwest is low when it lacks only about a fortnight of midsummer's day. It may well excite fears that the wheat in that part of the world will not have matured by the time that further vegetation for the year is stopped by the frosts of autumn. In

the other direction it is reported that the wheat in Tennessee has been struck by rust, and that is a mischievous extent of damage caused by which does not come out till harvest time. So far Kansas is the only State that gives promise of a good crop of wheat this year, and the countries of Europe appear also to be troubled with a backwardness of season that is far from auguring a good harvest yield."

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DAIRY PRODUCTS.

BUTTER.

General.

Jefferson Davis was eighty years old on the 3rd.

President Cleveland has signed the bill appropriating eighty million dollars for pensions.

In 1887, there were 104,000 gasoline stoves sold in the United States. There are 27 firms engaged in their manufacture.

Two counterfeitors were captured near Chattanooga, Tenn., last week, who had "shoved the queen" to the amount of \$15,000.

Destructive forest fires are raging in parts of Newfoundland, and several small hamlets have been burned out. Three lives have been lost.

Henry Villard is about to undertake an expedition to the North Pole. The director of a Dutch scientific society will co-operate with him.

Brock, alias Maxwell, murderer of Arthur Prentiss, must surely exonerate his crime on the 1st of July. The Supreme Court has fixed the date.

Gov. Hill of New York, has signed the bill by which death by electricity is substituted for hanging in capital cases after Jan. 1, 1889, in that State.

J. F. Irwin, of Oswego, N. Y., wanted a Bible so bad that he paid ten thousand dollars for a copy. But it was a very rare and valuable one.

There is a log jam of five hundred million feet in the Chippewa River above Little Falls. It is from twelve to sixteen miles long, and seventeen feet high.

The shops of the St. Johns Sewing Machine Company at Springfield, Ohio, and immense stock of valuable walnut lumber, went up in smoke last week.

A Boston publishing house has been systematically robbed of stock by its employees for the past 20 years and has just found it out. Loss estimated at \$200,000.

A national patrol of the coast of the United States is to be established by the members of the revenue marine, to aid in maintaining quarantine against infectious diseases.

The Y. M. C. A. has 1,240 associations in this country and 3,804 in the world. The American Associations have a membership of 175,000, and have a total net property of \$7,201,935.

The clerk in the pharmacy of a Cincinnati hospital met two hundred thousand persons without error. But he made a mistake the other day and mixed a fatal dose for a patient.

At the Democratic National Convention which met at St. Louis last week, Grover Cleveland received the nomination for a second term, with Allen G. Thurman, of Ohio, vice president.

The captain of the American fishing schooner A. E. Knickerbocker, seized at St. Johns, N. F., a violator of the oil act, attempted to leave the harbor while under arrest, and was detained by the police.

A cave-in at the St. Lawrence copper mine at Butte, Mont., entombed four miners. The mine was one of the largest in the city; 600 men were employed, and the output was 1,200 tons of copper per day.

By the new trunk line of railroad from Denver to Gulf of Mexico just completed, a wagon load of timber, practically impossible territory has been opened up. At least one million acres of heavily timbered lands are reported to be made available.

There is sold in Denver, Col., for use in the city and shipment to various portions of the country, \$1,500,000 worth of furniture annually. As it is sold for \$1 to \$2 per pound, freight on all brought from the east, Denver is certainly excusable for wanting some furniture factories of her own.

A combination to regulate the supply, price and scale of logs, has been formed by the loggers of Puget Sound, and at the regular monthly meeting last week it was determined on account of the large amount of logs put into the water to curtail the supply by members of the association till the end of the present year. The association represents three-fifths of all the loggers on the Sound.

General Phil Sheridan, who has been dangerously ill for the past three weeks, and whose condition has brought more anxiety than the two weeks before his collapse on the 1st, and it is feared cannot regain lost-ground. His will power has been a great aid to the physicians, but these repeated attacks of the heart trouble have weakened him greatly by the constant drain upon his vital energy.

There is an interesting telephone fight in progress at St. Louis, Mo. The municipal authorities passed an ordinance reducing the rate of telephones from \$100 to \$50. The Bell company retorted by taking the instruments out of 30 buildings, including the Mayor's office. Then the Mayor noticed that the rates were not taken down within five days, the city authorities would assist in the removal in a manner more expeditious than careful.

The City of Hull, opposite Ottawa, Ont., was visited by a very destructive fire, which swept over two words of the city, destroying about 40 houses and 150 yards of business blocks. The fire started in the city hall, and there being no adequate fire protection, spread very rapidly. The new Catholic church, worth \$100,000, the city hall, a convent, and a Presbyterian church were burned. The houses were all in the principal part of the city, and being of wood burned like tinder.

The Washington Post will be consolidated with the National Republican in a short time, and on the new paper will be used the Merchantantilist type machine, which sets type by machinery. Fifteen of these machines are now in use. The Post is the first newspaper to have been used to prepare matter for the paper. Young women have been taught to run them, and it is said corrected for the press can be produced at the rate of 3,000 to 4,000 per page. The printers are showing some of these machines, especially if they are to run by girls, by every means in its power, but will allow the use of the machines if men at full strength are not to be had. It is said that this would mean more to double the cost of composition as done by the girls, it is thought the proprietors will stick to the machines and the girls.

Foreign.
Buenos Ayres was shook up by an earthquake last week.

The Hanover cotton mills at London, 15,000 spindles, burned last week.

Don Pedro, Emperor of Brazil, who has been at the point of death, has greatly improved, and is able to be removed to Rio de Janeiro.

There is a movement to pay a premium to the country making a

large sum for the services of its soldiers, who have been up to 100,000,000 reals or over a million.

The child is greatly attached to the heart of the home, and the recovery of the

country is to be removed to Rio de Janeiro.

It is said that the British land bill has been abandoned by the British government, and will continue the Land Commission and increasing the sum to be advanced under the Ashurst bill, which will be introduced for it.

Mr. Whistler, the well-known artist, was defeated in his candidacy for election as president of the Royal Society of British Artists, and was so angry over his rejection that he resigned his membership. Two-thirds of his intimate friends followed his example.

"We consider American Housekeeping one of the best ladies' papers published. We feel that we cannot keep house without it."

A Cheap Country Paint.

A method of painting farm buildings and country houses, while by no means new, is yet so little known and so deserving of wider application as to warrant a description. The paint has but two parts, both cheap materials, being water-lime or hydraulic cement and skinned milk. The cement is placed in a bucket, and the skim-milk, sweet, is gradually added, stirring constantly, until just about the consistency of good cream. The stirring must be thoroughly done to have an even flow, and too thin, the mixture will run on the building and look streaked. The proportions cannot be exactly stated, but a gallon of milk requires a full quart of cement and sometimes a little more. This is a convenient quantity to mix at a time, for one person to use. If too much is prepared the cement will settle and harden before all is used. A flat paint brush, about four inches wide, is the best implement to use with this mixture. Lay it on exactly as with oil paint. It can be applied to wood-work, old or new, and to brick and stone. When dry, the color is a light, creamy brown, or what would call a yellowish stone color. Neither expression describes it well, but it is a very good color for a country building. A skin-milk paint, well mixed, without added color, has a good body, gives a smooth, satisfactory finish on either wood or stone, and wears admirably.

One farmer used this paint for a set of farm buildings, which have since passed through three winters and are now looking fresh and well. One building was new and the covering boards imperfectly seasoned; others had been whitewashed, some repeatedly for more than half a century. All appear equally well. The older buildings were prepared by scraping off the loose and scaly whitewash, the scraper being a curvy comb; it was not much work to do this. The expense of this piece of painting was surprisingly slight. A laborer at \$1.50 a day did the work, and he covered a two-story, twelve-room house in six working days. He laid on from three to four gallons a day, the whole quantity used on this building being less than a bushel of cement, costing fifty cents, and twenty-two gallons of skim-milk, worth less than a dollar on the farm. The whole cost of satisfactorily painting a good-sized house, brush included, was below \$12.

The painting mixture, so easily and cheaply prepared, was described in a recipe years ago, but a knowledge of it was diffused by General Le Duc while he was U. S. Commissioner of Agriculture. He mentioned an instance of a country house within his personal knowledge, the body of which was covered with skim-milk and cement, and the trimmings with lead and oil paint, 45 years before he described it; during this period the trimming paint had been renewed several times, but the cheap body color remained well preserved.

The Lewis Combination Force Pump is deservedly popular, and our readers will find a small advertisement headed, "A \$4 pump-free," in another column.

NEW ADVERTISEMENTS.

Are You Interested?

The Hannan Real Estate Exchange

WILL SELL AT

PUBLIC AUCTION!

—ON—

Thursday, June 14th, '88

At 1 o'clock p.m., on the premises.

THAT WELL KNOWN

FARM

Known as the MILLARD FARM, of

Four Hundred and Twenty-seven Acres,

Situated One Mile Southwest of Man-

chester, Washtenaw Co., Mich.

This farm is in a perfect state of cul-

tivation and has a crop of twenty-five acres,

which brings a handsome income in itself. The following Stock and all articles pertaining to the running of the farm will also go to the pur-

chaser.

40 Sheep, Ewes and Lambs, 6 Horses,

1 Mule and 14 Head Stock—Steers.

The buyer will also be entitled to all the growing crops, consisting of 65 Acres Growing

Crops, 40 Acres of Corn and 30 Acres of Oats.

Terms—\$500 down on date of sale and within 30 days from said sale one third down on the purchase price; the balance can run from two to five years.

NOTE—Parties of 10 or over within a radius of 20 miles will receive free transportation to and from the auctioneer.

A suitable lunch and other refreshments will be served free of charge.

Addres all communications to

The Hannan Real Estate Exchange,

153 GRISWOLD ST., DETROIT, MICH.

BRYON GREEN, Auctioneer

ma194t

\$6 PUMP FOR SPRAYING

FRUIT TREES

use Low's Com-

bination force

machines.

Send for par-

YOU CAN GET ONE FREE

LEWIS & COLES, Box A, Catekill, N. Y.

June 1, 1888

1888-Garfield" HAY TEDDER.

Simple, Durable, Light Draft.

Made in three sizes.

The only perfect

hay tedder hay.

Made only by

AMES PLow CO.

Boston and New York.

Agents and catalogues

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Poetry.

NEW MOON WISHES.

Once when the new moon glittered
So slender in the west
I looked across my shoulder
And a wild wish stirred my breast.

Over my white right shoulder
I looked at the silver horn,
And wished a wish at even,
To come to pass in the morn.

Whenever the new moon glittered,
So slender and so fine,
I looked across my shoulder
And wished that wish of mine!

Now, when the west is rosy,
And the snow-wreaths blush b-low
And see the light white crecent
Link downward soft and slow,

I never look over my shoulder,
As I used to look before;
For my heart is older and colder,
And now I wish no more!

—Rose Terry.

AGRO-DOLCE.

One kiss from all others prevents me,
And sets all my pulses astir,
And burns on my lips and tments me;
'Tis the kiss that I fain would give her.

One kiss for all others requites me,
Although it is never to be,
And sweetens my dream and invites me;
'Tis the kiss that she dare not give me.

Ah! could it be mine, it were sweeter
Than honey been garner in dream,
Though its bloss on my lips were fleeter
Than a swallow's dip to the sea.

And yet thus denied, it can never
In the prose of life vanish away;
O'er my lips it must hover forever,
The sunshine and shade of my day.

—James Russell Lowell.

Miscellaneous.

ISABEL FAE.

A TALE OF THE ORCADES.

"Know this, Isabel, nothing happens for nothing, and the end of it will be—"

"That I shall marry like the rest of the world, Elga."

"Well, if thou wilt put thy ears to sleep, thy way lass, every one must bear her own burden; and maybe all is not ill, that is ill-like."

"I set little on those black Highlandmen; and as for marriage, it's e'en like hanging—nothing but that is called."

"To-morrow, thou shalt come with me to see Donald."

"To-morrow, I shall do what relates to-morrow; it is ill hearing folk talk of the day they never saw."

It was evident that the old woman was deeply moved, though the girl standing by her side did not notice it; for her eyes were searching the bay for a little skiff she knew was waiting for her. Apparently she found it, for she slowly passed through the house-place, and stood in an irresolute, wavering manner upon the door stone, gazing southward.

Elga dropped the straw she was plaiting and looked at her, and in the cloudy purple atmosphere of an Orkney twilight, Isabel Fae was a realized dream of those fair stately Norse girls, for whom the ancient sea-kings did such wondrous exploits. Her bright golden hair made a glorious setting to her large, handsome, tranquil face; a face clear and open, like those beautiful pieces of water that let everything they contain be seen at the bottom, and yet a face with an indefinite shadow on it—that far off look, which the French call *précédesté*.

Indeed she stood that very moment between two fates, and she knew it. But the choice she made this hour would not be one of either ignorance nor necessity; she was free to make her own election. As she stood wavering, a clear ringing voice flung into the still evening air the stirring notes of a Highland gathering song:

Duncan's coming, Donald's coming,
Colin's coming, Ronald's coming,
Dugald's coming, Letitia's coming,
Alister's coming,
Little wae ye wha's coming—
But only way Donald's coming."

When Isabel heard the rapid chanting, her whole heart kept time and tune to it. "Donald's coming! Donald's coming!" it repeated, and without another hesitating footstep she walked rapidly and steadily to meet him.

He was waiting a hundred yards off, in one of those light, dainty skiffs that serve the Orcadians instead of a carriage, and when he saw Isabel coming toward him, he rowed to a little jetty and leaped out to meet her. Sweeter than singing was the hand clasp, and the glance, and the "Donald" and "Isabel" of the meeting, and if beauty be excuse for love, then both Isabel and Donald had it.

For handsome as Isabel was, Donald was just as handsome in his way—the way of the Calthness men—tall and strong and dark, haughty and stern to men, but in a kind of masterful way, dangerously sweet to women. Indeed there was a charm in his dark, passionate face and strong caressing manner, that few women could resist.

And to-night, Isabel having deliberately determined not to resist him, he had a double power over her. They floated out to sea together in that wondrous twilight which lingers in Orkney between day and day. There was a young bride moon in the east, and quivering from horizon to zenith, the rosy lances of the aurora. From the shore came the tinkling laugh of maidens knitting and gossiping round the village fountain; and from the seaward, the faint stir of cheery toll or song in the Dutch herring fleet, half-a-mile away.

As they drifted out with the ebbing tide, so they drifted back again with its flowing. Little had been said. They had understood each other without words. It had been enough that when they parted at her brother's gate, Donald had whispered, "Mine forever, Isabel!" and she had answered, "Yours forever, Donald!"

She was so happy she did not fear to meet to-night her brother's sour, angry face. He had been watching her with a wrathful heart; though, at Isabel's entrance, he seemed to be entirely occupied with his plate of smoked goose, and his glass of brandy and water.

"Good evening, brother."

"Good as good does, Isabel. It needs

no prophet to spae ill from the night's work."

"If I were thee I would not say such things, Peter."

"An' I were thee I would not do them. What's you black Scot, that he should come between us an' me?"

"He comes of a good kind, Peter; and I have e'en given my promise to marry him."

"Thou shalt bring no Scot into my house. We are Norse—blood and bone Norse. Forbye, the man is a papist. I'll never see thee put thy soul in danger."

"My soul is not in thy keeping, brother Peter; and I'm thinking it is my tocher that is fastening thee, maybe."

Peter Fae rose at this remark and faced his sister with a passionate gesture.

"An' what if it is, woman?" he said angrily. "I am thy nearest kin, and I ken weel what a born fool thou art in money matters. This McNab is nae better than the lave o' them, an' as for world's gear, he could mak his will on his thumbnail. Indeed could he!"

"I am not marrying for world's gear, Peter."

"Whatna for then?"

"For love."

"Oich! Such daft nonsense! An' about the siller?"

"...T will be time to talk of that afterwards. I am telling you about Donald, because I would be loth to marry without your blessing, Peter."

"How can I bless what's a' wrong, Isabel? An' whar will ye get married awa? Know this, there is nae a dominie in Orkney wad daur to say a prayer at sic a wed-ding."

"Many things are said that are not true; how dost thou know that Donald is a papist?"

"Werna a' the McNabs finger an' thumb wi' the Stuarts an' the scarlet woman? And as for this lad, wha has ever seen him in the congregation of the faithful?"

A slight shadow gathered on Isabel's radiant face. She went to the open window, and looking upward. The very act was a prayer, and Peter felt and respected it. If she was speaking to God, it behooved him to be silent. He waited until she came to the table and sat down by him. "Brother," she said, "shall I ask Donald of his faith?"

"Sister that as you please; but know this, a lad's faith an' siller are the twa pillars o' the house."

"I thought of nothing but his love, Peter; only his love; and he loves me, and comes of a noble strain. A Fair may be proud to wed with the McNab; and if Donald has nae been right taught in matters of faith, who can learn from better than me?"

"If McNab came o' the blood royal, he's none too good for thee. Who is the McNab? Can he trace his kin back, as we do?"

"Well, if thou wilt put thy ears to sleep, thy way lass, every one must bear her own burden; and maybe all is not ill, that is ill-like."

"I set little on those black Highlandmen; and as for marriage, it's e'en like hanging—nothing but that is called."

"To-morrow, thou shalt come with me to see Donald."

"To-morrow, I shall do what relates to-morrow; it is ill hearing folk talk of the day they never saw."

It was evident that the old woman was deeply moved, though the girl standing by her side did not notice it; for her eyes were searching the bay for a little skiff she knew was waiting for her. Apparently she found it, for she slowly passed through the house-place, and stood in an irresolute, wavering manner upon the door stone, gazing southward.

Elga dropped the straw she was plaiting and looked at her, and in the cloudy purple atmosphere of an Orkney twilight, Isabel Fae was a realized dream of those fair stately Norse girls, for whom the ancient sea-kings did such wondrous exploits. Her bright golden hair made a glorious setting to her large, handsome, tranquil face; a face clear and open, like those beautiful pieces of water that let everything they contain be seen at the bottom, and yet a face with an indefinite shadow on it—that far off look, which the French call *précédesté*.

Indeed she stood that very moment between two fates, and she knew it. But the choice she made this hour would not be one of either ignorance nor necessity; she was free to make her own election. As she stood wavering, a clear ringing voice flung into the still evening air the stirring notes of a Highland gathering song:

Duncan's coming, Donald's coming,
Colin's coming, Ronald's coming,
Dugald's coming, Letitia's coming,
Alister's coming,
Little wae ye wha's coming—
But only way Donald's coming."

When Isabel heard the rapid chanting, her whole heart kept time and tune to it. "Donald's coming! Donald's coming!" it repeated, and without another hesitating footstep she walked rapidly and steadily to meet him.

He was waiting a hundred yards off, in one of those light, dainty skiffs that serve the Orcadians instead of a carriage, and when he saw Isabel coming toward him, he rowed to a little jetty and leaped out to meet her. Sweeter than singing was the hand clasp, and the glance, and the "Donald" and "Isabel" of the meeting, and if beauty be excuse for love, then both Isabel and Donald had it.

For handsome as Isabel was, Donald was just as handsome in his way—the way of the Calthness men—tall and strong and dark, haughty and stern to men, but in a kind of masterful way, dangerously sweet to women. Indeed there was a charm in his dark, passionate face and strong caressing manner, that few women could resist.

And to-night, Isabel having deliberately determined not to resist him, he had a double power over her. They floated out to sea together in that wondrous twilight which lingers in Orkney between day and day. There was a young bride moon in the east, and quivering from horizon to zenith, the rosy lances of the aurora. From the shore came the tinkling laugh of maidens knitting and gossiping round the village fountain; and from the seaward, the faint stir of cheery toll or song in the Dutch herring fleet, half-a-mile away.

As they drifted out with the ebbing tide, so they drifted back again with its flowing. Little had been said. They had understood each other without words. It had been enough that when they parted at her brother's gate, Donald had whispered, "Mine forever, Isabel!" and she had answered, "Yours forever, Donald!"

She was so happy she did not fear to meet to-night her brother's sour, angry face. He had been watching her with a wrathful heart; though, at Isabel's entrance, he seemed to be entirely occupied with his plate of smoked goose, and his glass of brandy and water.

"Good evening, brother."

"Good as good does, Isabel. It needs

no prophet to spae ill from the night's work."

"If I were thee I would not say such things, Peter."

"An' I were thee I would not do them. What's you black Scot, that he should come between us an' me?"

"He comes of a good kind, Peter; and I have e'en given my promise to marry him."

"Thou shalt bring no Scot into my house. We are Norse—blood and bone Norse. Forbye, the man is a papist. I'll never see thee put thy soul in danger."

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"Good evening, brother."

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A WOMAN'S REASON.

You said to me, "Why don't you do it?" I only could answer, "Because." You laughed at the feminine reason, And prated of logical laws; I laugh at your trumpery science— What good are you going to do With a logical chain that is faultless, And nothing to fasten it to? You have to take something for granted, Just like any woman's dunces; Your argument needs a foundation, So let us put it firmly at once.

A fable says earth is supported By a turtle that rests on a cow; The cow is sustained by a something, But never a fable says how; And that is the way with your reasons— Thus far and no further you go; There's a sm'eting you never can fathom, Some basic yea you never know. If you and your logic were missing, The world would not totter or pause; Accept, then, what is (if you like it), And give as your reason: "Because."

—MIRIAM K. DARIS.

The Poor in China.

In America, when the laboring man and family cannot afford to eat meat twice each day, they are supposed to be in a condition of destitution. Yet the Chinese laborer, getting what he calls good wages, does not eat a pound of meat in a month, although meat is as cheap in China as in America.

His daily food consists of rice steamed, cabbage boiled in a great deal of water, and, as a relish, raw turnip pickled, but in a strong brine, of which he has only two or three bits the size of dice.

When he wishes to be very extravagant, and is reckless of expense, he buys a cash worth of the dried seeds of the watermelon, and munches them as a dessert. In summer he eats cucumbers raw, skin, prickles, and all, or melons, not wasting the rind, or, it may be, a raw carrot or turnip.

His clothing is as simple as his diet. In the summer it consists of shoes and stockings, both made of cotton cloth, and a pair of trousers, without lining, of the same material. He has also a sort of shirt worn out, side of the trousers, but this he wears only on state occasions.

For spring and autumn he wears, if he can afford it, garments of the same material lined. In the winter, in a climate like New York or Philadelphia, his trousers are waded and his upper garment is either also waded or is a sheepskin tanned with the wool on and worn with the wool next his skin.

He wears underclothing of every sort. One suit answers for day and night, since he sleeps in the same clothes in which he works. Hence he is not troubled with much baggage when he goes on a journey.

Three dollars would probably buy the entire summer wardrobe of what might be called a comfortably poor Chinaman—that is, one at work on steady wages—while 25 or 30 cents would be more than sufficient to purchase all the rags—and he wears nothing else—of the very poor. In the winter he always pawns his summer clothes and in the same way intrusts his winter clothing as soon as warm weather comes, to the keeping of his "uncle."

His house is built of either sun-dried or "broken" brick laid in mud, has never any other than a brick, or, more commonly, a mud, floor, windows of paper, and a door sufficiently open for all purposes of ventilation. For a family of five or six persons there is seldom, if ever, more than one room.

The entire furniture consists of a table, a rickety stool or two, and a raised platform of brick covered with a coarse mat of reeds, which serves for a bed.

The house has no chimney and no fire is used, winter or summer, except the small amount needed for the family cooking.

The character of the food consumed in such a family has already been described, though something ought to be said as to its cost. It is a very common picture in Pekin or any other city in China to see a little boy or girl going with a few cash and two or three rude and cheap dishes to purchase the materials for an evening meal, and the average cost of such a meal as has been described, for one person, is certainly not more than two cents of our money.

I am convinced from many years' residence among the Chinese and careful study of their habits and life, that probably two-thirds of the entire population, or say 200,000,000 of the people, live on a food consumption not exceeding \$1.50 of our money a month, or say five cents a day.—*Youth's Companion.*

Mr. Beecher on Amusements.

I love color, and I think it is one of the misfortunes of our set that we can't wear anything but black or gray, perhaps, in summer. Now, in nature the male is always the most gorgeous, but, except in the time of the cavaliers, the dress of the men has been sombre. The cavalier was magnificent. I wish the day might come when we might dress so again—I should like to flame out myself—(laughter)—but it is too late, too late. When I was in college a man found playing a game of cards would have been expelled. If they now expelled all who play there would be few left. A gentleman visiting Yale, and being shown the gymnasium, with its billiard-tables and bowling alleys, remarked to the professor who was escorting him over the place: "Forty-five years ago I was expelled from this college because I rolled nine-pins." Now, I would not advise young men to go into billiard saloons, from practical common sense reasons. Not that I have any objection to billiards. I have a table in my room in Peekskill, and every Christian family ought to have one. I don't know how to play cards, but I have no objection to my children playing. I don't think there is any harm in horse-racing, to the horse in the first place; but to the men a great deal. The newspapers say: "You ought not to stand in the way of men that are developing the speed of the horse," but I say it is very poor economy to feed the horses with young men. When I look at the effect of the race-course I cannot afford to waste a whole generation of young men for the sake of getting one second down in the record of a trotter; and the very reason that makes it proper to open public schools, or to establish churches, makes it proper to put down gambling dens and this pool-selling, which is the worst form of gambling. Abstractly there is no harm in running one horse against another, any more than there is in running one boy against another; but you have no right to improve the breed of horses by spoiling the breed of men.

The Sultan's Musicians.

Most of the tales about Abd-ul-Hamid are, indeed, trivial enough. They mainly illustrate his feeble-mindedness and caprice. Take the one of the court pianist. One day his Imperial Majesty sat in his Imperial Palace cutting out silhouettes of black paper as a solace from the cares of state. All at once he called for soft music, and bade his court pianist play a polka. The latter, thinking to please the sovereign more, sat down at the instrument and thumped out the "Imperial March" with all due energy and fervor. Not a word escaped the lips of the sovereign, and the pianist never gave the master a thought until that evening, when a messenger from Yildiz informed him that the Sultan had no further need of his services. In other words, he was cashiered—deprived of his appointment, his house and a salary of \$300 a year. Alas! a wrong tune will suffice to ruin a man in Turkey.

Another time, during a pantomime at the court theater at Yildiz, Dussep Pasha played the "Imperial March" while a jibbering jackass brayed and pranced about the stage.

The Sultan was furious at hearing his own sacred and particular march played as an accompaniment to the dancing of a common donkey, and he dismissed poor Dussep on the spot. The penitent Pasha was, however, afterwards restored to imperial favor, as the whole affair proved to be nothing more than a court intrigue to work his disgrace.

With his musicians the Sultan has always been capricious. His pet violinist, Wondra, wished to leave the court and go to Paris, to study there with the best of masters. A petition was accordingly presented to his Imperial Majesty, who abruptly tore it up, and flung the pieces at the messenger, and said: "Why should he study? Is it to earn money? If he wants my treasure, I will open it; let him help himself and stop here. I wish it." So, willy-nilly, Wondra had to

Two Cheap Refrigerators.

Some years ago, when living in the country, the writer conceived the idea of getting up a home-made refrigerator that would combine three forms of economy: economy in cost, economy in ice, and, lastly, economy in space, as it was desired to fit into a particular place and there was nothing in the market of the proper shape. A pine box of matched stuf, measuring perhaps 3½ feet long by two feet wide and 20 inches deep, formed the base of operations. Three-quarter inch cleats were nailed around the inside edge about 2½ inches from the top and also around the four sides at the bottom. Tongued and grooved spruce flooring, three inches by ½ inch, was obtained and sawed into lengths to reach from the bottom of the box flush with the top of the upper cleats. Before they were nailed in, however, the three-quarters of an inch of space between the cleats was filled with newspapers and other paper waste, laid flat, a large quantity being consumed in the "packing." Then the spruce lining was secured in place, the tongues being smeared with white paint to insure tight joints. Cleats were then nailed lengthwise upon the bottom of the box, paper filled in before, and the flooring, also of spruce, sawed to lengths and nailed in position, care being taken to have a snug fit at the ends. A lattice partition was then made at one end for the ice compartment, allowing perhaps one-third of the inner space for this purpose. Next a strip of pine two inches by a half inch was nailed flatwise around the inner edge of the box to cover the cleat and the upper ends of the spruce lining, leaving a projection of about half an inch, and a piece was also carried across the top of the partition. The spruce covers were then made to fit in the openings thus formed, a strip of pine around the four sides, nailed upon the top flatwise and projecting half an inch, forming a rim to keep them in place. Wooden knobs were screwed into the center of each to lift them by, and a hinged outer cover of pine completed the affair, as far as the carpentry was concerned. The ice receptacle was then flooded with sheet lead, the edges being turned up about five inches, and a one-half inch lead pipe for carrying of the waste water was attached and carried through the floor out of a cellar window, and to some distance away from the house, a bend, or *z*, being formed near the ice box to keep the pipe close. The inside of the box was then given two coats of white shellac, two small holes were bored in the sides, at the top and bottom, for ventilation, and the box was complete.

If I could have restrained myself for a few minutes the monster would no doubt have sunk beneath the waters again, but the awful stare of its great eyes, the sight of the terrible beak, the squirming of those horrible feelers as they tried in vain to touch me, made me cry out loudly. I might have known that I could have made no headway against the monster with the means at hand but, acting on the impulse of the moment, I picked up a good sized rock and flung it with certain aim at the pelvis body. It was at this moment that Thurber rose up in the boat to see what was going on. The creature didn't see him at first, being entirely occupied in trying to get me into its clutches. I believe Thurber could have pushed the boat off and floated away in safety, but he also acted on the first impulse. Lifting up one of the heavy oars he dashed the octopus a heavy blow, no doubt inflicting severe injury. He was raising the oar for a second blow, when I saw three or four feelers whip through the air at once and fasten to him, while the creature emitted a hissing sound like the blowing off of steam. The man uttered a scream of terror and fled as the feelers caught him, and sank down in the boat and clung to a thwart with the clutch of despair.

Everything had taken place in a moment, and I wasn't to be blamed for not knowing exactly what to do. However, I perhaps accomplished all that could have been done under the circumstances. I hurried rock after rock at the creature, striking it fairly several times, but it refused to let go of Thurber. It kept two of the feelers ready for me, and once, when in my excitement and anxiety I approached too near, one of the feelers came so close to catching me that it struck my foot. The screams of my poor shipmate were terrible to hear, and they alarmed the crews of several vessels half a mile away. Two boats put off for us, but they had not passed over half the distance when the octopus put forth its strength and jerked Thurber from his hold and overboard. The water at that point was twenty feet deep, and it was apparent that there was a sort of cave or recess in the rocks which was the home of the creature. We rolled more rocks down, got a long pole and thrust it down, and after an hour's work got hold of the sailor's body and brought it to land. There was a terrible gash in his back, made, no doubt, by the beak of the octopus, and whenever the cups of the feelers had taken hold there were livid spots or blisters, but neither the blood had been sucked out nor any of the flesh eaten. I do not think any effort of ours scared the creature into giving up the dead. It had retained its hold until certain that life had departed, and had, perhaps, clung to it the longer for our attempts. The natives said that heaving the stones brought him up for a fight, and that but for my action we should have seen nothing of him.

The Perils of Our Fast Age.

The strain upon a man engaged in active business today is five, ten, ten-fold more than it was forty or even twenty-five years ago. We live in an age of electricity, and it is not only along the wires that the fluid is passing, but it touches so many currents of thought and affect so many business interests that a keen, bright man is sensitive to the news of the whole world. In former times it was the arrival of the packet ship with thirty days' later news from Europe; then it was the arrival of the steamship with six days' later intelligence; and now the morning paper brings the news which, according to time, is being made in all parts of the world. It is impossible for an active, energetic man to cut off his connection with this ever-pulsating agent. A flash, and he opens a dispatch from a friend in Bombay, and the tinkling bell calls him to the telephone to hear from a business agent in a neighboring city. He is kept at high pressure, as it is market pitch from Jan. 1 to Dec. 31. It is no wonder that men who do not offset this high tension by judicious repose break down and are forced to quit work. The workers of 1888 do more work which is wearing in one week than our grandfathers did in a six-month. There is no danger that a man will rust out if he has eyes and ears. The bulletin boards of the newspapers furnish enough suggestive matter each day to keep the cobwebs from the brain of the most indifferent. It is evident, we think, that some new system of living must be adopted, more frequent release from the vocations taken, if men are to retain their vigor and not become wrecks when they should be in the prime of life.

The Octopus.

The St. Louis Star is responsible for the following rather Munchausenish yarn about the devil-fish, the octopus of the naturalists:

In 1865 I was one of the crew of the American bark Henry Castle, which made a voyage to the Java Sea, and sat at several of the larger islands. One day while the ship was lying in the outer harbor of Samang, Island of Java, two of us pulled the captain ashore, in the gig. We landed him on a rocky point, from whence he took a short cut across to the town, and we were ordered to wait there until his return. My shipmate, whose name was Thurber, stretched out for a nap as soon as the captain was gone, while I got out on the point to have a look around. The water was pretty deep alongside the boat, and by and by, of full sailor's deviltry, I picked up a large rock and heaved it into the water with a great splash. I calculated on seeing Thurber jump up in alarm, and "I'll be you a dollar you won't see a lion." "Done!" said the showman eagerly, "put down your money." The man placed a dollar in the hand of a bystander, and Dan did the same. "Now walk this way," said the showman, "and I'll soon convince you. There you are," said he triumphantly, "look in that corner at the beautiful Numidian lion." "I don't see any," responded the man. "What is the matter with you?" asked the showman. "I am blind," was the grinning reply, and in a few minutes the man pocketed the two dollars and went away.

A citizen met, some months since, in the south, a Boston merchant who had been in business for forty years. "I suppose you are here for your health," said the citizen. "In one sense, yes. I am in the enjoyment of excellent health, and I am trying to keep so," was the reply of the wise merchant.

The unwise merchant generally waits till his doctor suggests that he had better make his will and take recreation before he concludes that the amassing of great wealth is no equivalent for the loss of vital energies.

Boston Journal.

Put Grimly.

The Dean Swifts are not all dead yet, as witness the following compilation by a writer on the San Francisco Wasp:

Men clinging to their wives through various scenes—

Through mere love of comfort, as one is attached to a good kitchen utensil.

Through habit, as one likes the cosy armchair he is always certain to find in one place on coming home.

Through economy; you could not hire a servant who would not cost you twice as much and serve you only half as well.

Through pride, just as one persists in refusing to consider a foolish choice one has made, lest people should talk about it.

Through love of peace; a separation would cause so much scandal and create so much trouble.

Through fear of public opinion; what would the neighbors say, and her friends and, above all, her relatives?

Through imitation; everybody clings to his wife, so one must do like the balance.

Through instinctive attachment to the children one has had by her.

Through force of character, just as a great soul bears a catastrophe without a word of complaint.

Through virginal dignity; one must respect one's name, you know.

Through legal compulsion; there is no cause to offer for a suit; there are no facts to justify it.

Through philosophy; all women resemble each other.

Through a spirit of penitence:—"It is all my fault, all my fault, my most grievous fault."

Through petty vanity, because every one says—"Oh, what a splendid woman!"

Through remorse of conscience:—"Poor little woman, it is not her fault that I am tired of her."

Through spite:—"So I have been caught in the trap! Ah, let others fall in it also!"

And now, ye untrustworthy apostles of domestic worship, that I have summed up these variations of conjugal attachment, find me the house I have been looking for, to, lo, these twenty years, in order that I may add:—"Sometimes, after a few months of married life, a man still clings to his wife through love of love."

VARIETIES.

WEAK FIELD GLASSES.—Miss Vassar (just graduated with high honors)—I declare it's too provoking. Here we have been out for three days, and watched and watched, and haven't seen one yet—

The doctor (gallantly):—It is too bad. Now just tell me what you are looking for, and—

Miss Vassar:—Why, the lines of latitude and longitude, to be sure. I have always wondered how the ships got over them—or is it under them—it is very puzzling.

CHILDREN sometimes hit upon a phrase which conveys more than pages in which their elders have striven to set forth things clearly, and an instance was afforded recently by a girl of six. She had been present while her mother received a call from her neighbor, one of those immeasurably voluminous women who are the terror of their friends; and after the caller had departed she said to her mother with the utmost seriousness: "Mamma, I don't think I like Mrs. Blank. She leaks words all the time."

READY FOR THE JOB.—A young fellow strolled into a newspaper office in a western city and laying down a clipping from a "want column" in which a druggist advertised for a "pharmacist," said:

"Git me a nice black dot and I'll give you a thaler."

"Have you had any experience as a pharmacist?" queried the astute clerk at the "ad" window.

"Ogborneur?" said the young fellow, opening wide his blue Teuton eyes. "I say, say, say! I was born on a farm, and I work on a farm in Dakota for six years, and know it all."

He was an Englishman, and no quicker in catching the meaning of things he saw and heard in America than his countrymen usually are. He was riding down-town in a buck bay car, when suddenly, as Park Square was neared, the conductor thrust his head in at the door and cried out suddenly:

"Charles!"

Three well-dressed women rose hastily and hurried out of the car as if the individual mentioned were exceedingly elusive, and must be caught at once. The Englishman craned his neck curiously, but could see nobody remarkable outside.

"Do you mind telling me," he said to his companion, with an air of bewilderment, "who Charles is?"—Boston Courier.

KITTY is three years old and her brother, two years older, is not an angel by several degrees. The other night, after saying her prayers, she said to her mother:

"Now, mamma, isn't there something else that I should pray for?"

"Yes, Kitty; pray that the Lord will make you a better girl and George a better boy."

Kitty folded her hands and closed her eyes.

"Ahd, dear Lord," she whispered, "make Kitty a good little girl and—Amen."

"Why, Kitty," expostulated her mother, "that isn't right. You should pray for your brother, too."

"I think not, mamma. I know that boy too well."

A GOOD story is told on Superintendent Nash of the railway mail service, who has just tendered his resignation. Fault has been found with him, because his desire for an efficient service led him to be very slow in making removals. In the early part of his senatorial career, State of Tennessee called upon Nash with a friend to ask the removal of a Republican postmaster.

"What charges have you made against him?" asked Nash. "None, except that he is a Republican," said the Senator. "I want his place for a Democrat," "There is a rule in force here," said Mr. Nash, "that no clerks are to be removed except for cause, and I cannot comply with your

(Continued from first page.)

Manner 13332, out of Louan of Chesterfield by Baron of Aldridge, to J. B. Laraway, Emery, \$65.

Mary Gay, a Young Mary, got by Commander-in-Chief 47714, out of Lady 15th Duke of Hillsdale 16820, to Franklin Mills, Constantine, \$70.

Maud La Grand, a Young Mary, got by Commander-in-Chief 47714, out of Lady Maud 3d by Mr. Companion 46711, to Conley, Lockwood & Henning, Marshall, \$85.

Maryworth Maid, a Pomona, got by Commander-in-Chief 47714 out of Ball's Rowens by Oxford Argyle 20584, to Franklin Wells, Constantine, \$155.

Hayworth Maid 2d, a Pomona, Got by Major Barrington 53602, out of Hayworth Maid, by Commander-in-Chief 47714, E. G. Garvin, Ann Arbor, \$75.

Lucky Belle d', a Young Mary, Got by Duke of Noxubee 9920, out of 6th Bath, by Duke of Noxubee 9920, S. R. Cuttenstein, Saline, \$145.

Third Duchess of Hamburg, a Young Mary, Got by Renick Wild Eyes 64189, out of Lucy Belle d', by Duke of Noxubee 9920, John Lester, Jersey, \$135.

Merry Maud, a Young Mary, Got by Barrington Duke of Webster 58868, out of Lady Maud 3d, by 15th Duke of Hillsdale 16820, Conley, Lockwood & Henning, Marshall, \$150.

Red Star 6th (Weddle Importation), Got by Red Prince 24568, out of Red Star 4th, by 11th Duke of Hillsdale 13987, D. B. Sears, Ann Arbor, \$90.

Ethelreda, a Young Mary, Got by Commander-in-Chief 47714, out of Lucy Aldridge, by 20th Duke of Aldridge 13872, James Turner, Lansing, \$250.

BULLS.

Commander in Chief (a Cruckshank), Got by Commander 44897, out of Lucy Aldridge, by Scotland's Pride (25100), Conley, Lockwood & Henning, Marshall, \$100.

Phyllis Eclipse, a Young Phyllis, Got by Commander in Chief 47714, out of Fanny Combs 2d, by imp. Pioneer 12593, D. Knapp, Hamburg, \$50.

Rosemary Duke, a Rosemary, Got by Crusader 62140, out of Lady, by Lord of the Manor 12332, E. C. Warner, Ypsilanti, \$35.

Sharon Duke of Springfield 2d, a Rose of Sharon, Got by Sharon Duke of Springfield 77807, out of Duchess of Springfield, by Duke of Crown Farm 38332, C. Brown, Ann Arbor, \$50.

Willis' Beauty Duke, (Cox Importation), Got by Commander in Chief 47714, out of Cora C. by Roan Duke 71519, T. Buckbee, Pontiac, \$100.

Ron Barrington, a Strawberry, Got by Lord Barrington 24 30115, out of Strawberry 4th, by 11th Duke of Hillsdale 9364, J. A. Sperry, Ann Arbor, \$70.

Bardwick of Western, a Strawberry, Got by Barrington Duke of Webster 58868, out of Lady Stewart 2d, by Lord Compton 46471, Gilbert Hurd, Saline, \$120.

Webster Duke, Got by Duke Compton 69138, out of Ada Compton by Lord Compton 46471, Ira Crippen, Ypsilanti, \$80.

SPRAYING FRUIT TREES.

The Subject Discussed by the Napoleon Farmers' Club.

At the May meeting of this club a discussion on the subject of spraying fruit trees was opened by a paper from Dr. A. H. Reid, which was as follows:

No subject at the present time is of greater magnitude to the agriculturist, the horticulturist and pomologist than that of entomology. The study of entomology, embracing the study of insects with reference to their relations to each other, and to the best nature, or the study of insects with reference to the wants of man, is at the present time engaging the attention of scientists and entomologists generally.

Throughout our country we have a vast army of workers, taking notes and collecting statistics with reference to this branch of entomology.

Experimental bureaus have been inaugurated in many States of the Union, and a vast amount of money and labor has been expended in the work of detecting and in insects in relation to the wants of man, and yet the ultimate is not reached.

The recent advance in our knowledge of the life-history and habits of species has been great, but leaves yet an immense field for future researches.

Insects of all classes, both destructive and beneficial, probably outnumber all of the other animals combined, some 350,000 species having already been described and fully as many more to be characterized.

The scientific names of each species will leave for the lack of time and space for you to study at your leisure.

With this vast army of deadly and destructive enemies arrayed against agricultural pursuits in this country, is it to be wondered that farmers are on the verge of despair after successive trials with repeated failures?

The subject assigned me for discussion to-day, that of spraying fruit trees, is one of great interest to all, the general farmer as well as the agriculturist.

Our orchards are fast becoming annihilated (especially the older ones) and farmers are generally neglecting them altogether for the reason that insects and disease are making such inroads upon them, that apple growing is a failure and does not pay.

Now I know of no reason why, if the same amount of vigilance and persistent labor as is put forth to raise a potato crop should be expended upon our apple orchards, success would not crown our efforts; and in place of so much inferior fruit, we should have the perfectly ripe and luscious fruits of great profit in a financial point of view.

The enemies to the fruit culture in this section are vast and varied. Lintrier recently records no less than 176 species of insects affecting the apple. Time will not allow the study of the habits of these insects; suffice it to say that they are busy creatures determined on gaining a living for themselves and destruction to others.

We have to do in this section of country chiefly with four or five varieties of injurious insects affecting our orchards: The codling moth, producing the larva of apple worm; the red borer and the plum curculio, so destructive to the plum, pear, peach and cherry.

It matters but little to us what the scientific names of these insects are, or what their life habits may be, but the question of protecting our tree and fruits from their ravages should, and must, engage our attention if we succeed in fruit growing.

The statesman says: "Eternal vigilance is the price of liberty."

The time was when the codling moth tarnished no Michigan apples, and the plum curculio caused no fear in Michigan.

Later the Colorado potato beetle made its appearance, then currant saw flies came to snatch our currants from us; soon the cabbage butterfly stole in upon us to rob us of our sourkraut, and thus every season brings new recruits to this horde of despoilers.

The use of insecticides by means of spraying is no longer a matter of experimentation, but a great success. Of insecticides recommended, none have been recommended, and many of them tried with more or less satisfaction. Of these may be mentioned soot, sulphur, lime, corrosive sublimate, turpentine, carbolic acid, sulphate of copper, etc. Most of these may be used for specific purposes, either dry, in liquid or in vapor. Transcending in importance any of these older insecticides, are the three now commonly used, because most satisfactory. They are preparations of arsenic, petroleum and pyroxylin. While dry, they do not last long, but are one of the most effective insecticides in use.

Of the aromatic compounds Paris green is the one most effective, when a good article can be procured, and may be used dry or in liquid. A rags obtained

in the manufacture of aniline dyes, and known as London purple, is much cheaper than Paris green, just as effectual and less liable to injure the foliage. Prof. Cook, of the Agricultural College, says he finds that London purple is easier mixed with water for spraying and just as effectual for the destruction of the codling moth as Paris green.

Great care should be taken not to make the liquid for spraying too strong, and then destroy the plants as well as the insect. One pint of Paris green or London purple grades at 12@14¢ Low grades unsatisfactory quiet at 17@18¢.

CHEESE.—New quoted at 9@10 for full cream State, 10@11¢ for New York, and 8@10¢ for Ohio. Skins quoted at 5@6¢.

DAIRY.—Two barrels or 100 gallons of water, will be sufficiently strong for the largest tree, keeping it well stirred.

For a small orchard the spraying may be accomplished by means of a hand force pump with the nozzle of the pump flattened so as to break the liquid up into a spray. For large orchards common barrels should be used and be drawn in a wagon. Large force pumps can be procured with gearing attachments which can be connected with the wheel of the wagon and thus save hard labor.

For the bark or scale house or borer, the kerosene oil emulsion is meeting with great favor with horticulturists generally.

An emulsion is made with two parts of refined oil to one part of sweet or sour milk, which should be thoroughly mixed and then thinned with water to the desired strength.

In the discussion which followed Mr. C. A. Elliott said he had been quite successful in previous years raising plums by covering the trunks of the trees with a mixture of sulphur and lard, but last year failed, and having seen the idea recommended of winding the trees, had bandaged several and should wait the result with anxiety.

W. C. Weeks said he knew of an old orchard (apple) that had been nearly abandoned till its owner was told to use freely salt and ashes on the earth beneath the trees in the early spring. When he did so, drawing it by the wagon load and fairly covering the ground with the mixture, the result was as fine and large a crop of apples as had been seen for many years.

M. L. Dean spoke of seeing a practical gardener and fruit culturist use dry ashes by sifting them on his plum trees in the morning while the dew was on with first class results, and also said that pear trees would flourish by using an amount of salt that would kill nearly every other kind of fruit trees. Thought it made them very prolific in bearing.

Mrs. Colgrove said that the plum curculio, being a minute fly hatching beneath the tree from the larva of the stung fruit of the previous year, and ascending to the tree in the early morning, could be captured by placing a sheet beneath the tree, then jarring the tree heavily by some means, after which they could be destroyed in the stove.

Dr. Reid said some expressed fears of the poisonous compounds injuring the fruit, but there need be no fears, as tests have been made and no analysis could detect the least trace of poison in the matured fruit.

Mr. Lyon said if plum orchards were planted now as other orchards are, i.e., in a body instead of straining the trees along the fences, experiments showed that plums could be raised successfully, as the pest only troubled the trees on the outer edges, while the center of the orchard seemed free from the ravages of the curculio.

THE CINCINNATI CENTENNIAL EXPOSITION.

Departments Embraced—Prominent Features—Completion of the Buildings.

The Hundred Days of Festivities, to be known as the Centennial Exposition of the Northwestern Territory and the Ohio Valley, at Cincinnati, have a broad meaning, not only to the people of this vast central portion of our country, but to the people of the United States and the world. The enterprise and energy exhibited by the Commissioners, selected from the eleven different States which are closely related thereto, have resulted in the institution of a Colossal Fair, than which none other ever held has more importance and significance.

This is sufficiently established, in the very liberal guaranteed endowment of a million and fifty thousand dollars, in the erection of buildings covering forty acres of ground, and in the almost overwhelming number of applications for exhibiting space which have been received from the enlightened centers of the world.

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The guarantees of more than a million dollars by the citizens of Cincinnati was the first step taken, and came in immediate response to the asking, banks, merchants, capitalists, citizens in general coming forward without hesitancy.

The planning, contracting for, and completion of, the building within two months of the time required, was a feat in which the projectors take a most pardonable pride.

The applications for exhibiting space have exceeded the most sanguine expectations, and if there be anything in the signs of the times, the attendance at this jubilee will exceed that which it has been the good fortune of any similar enterprise to enjoy.

LIVE STOCK MARKETS.

At the Michigan Central Yards.

Friday, June 8, 1888.

CATTLE.

The offerings of cattle at these yards numbered 263 head, against 324 last week.

For good cattle the market ruled stronger than last week, but common grazies lost a week at a decline of 10@15 cents.

WEDNESDAY.—Loadings: Five at \$15@16; fifteen at \$16@17; twenty at \$17@18; twenty-five at \$18@19; thirty at \$19@20; forty at \$20@21; fifty at \$21@22; sixty at \$22@23; seventy at \$23@24; eighty at \$24@25; ninety at \$25@26; one hundred at \$26@27; one hundred and ten at \$27@28; one hundred and twenty at \$28@29; one hundred and thirty at \$29@30; one hundred and forty at \$30@31; one hundred and fifty at \$31@32; one hundred and sixty at \$32@33; one hundred and seventy at \$33@34; one hundred and eighty at \$34@35; one hundred and ninety at \$35@36; one hundred and twenty at \$36@37; one hundred and thirty at \$37@38; one hundred and forty at \$38@39; one hundred and fifty at \$39@40; one hundred and sixty at \$40@41; one hundred and seventy at \$41@42; one hundred and eighty at \$42@43; one hundred and ninety at \$43@44; one hundred and twenty at \$44@45; one hundred and thirty at \$45@46; one hundred and forty at \$46@47; one hundred and fifty at \$47@48; one hundred and sixty at \$48@49; 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